THOMSON SCENIUM

DPL 4000

Home cinema receiver

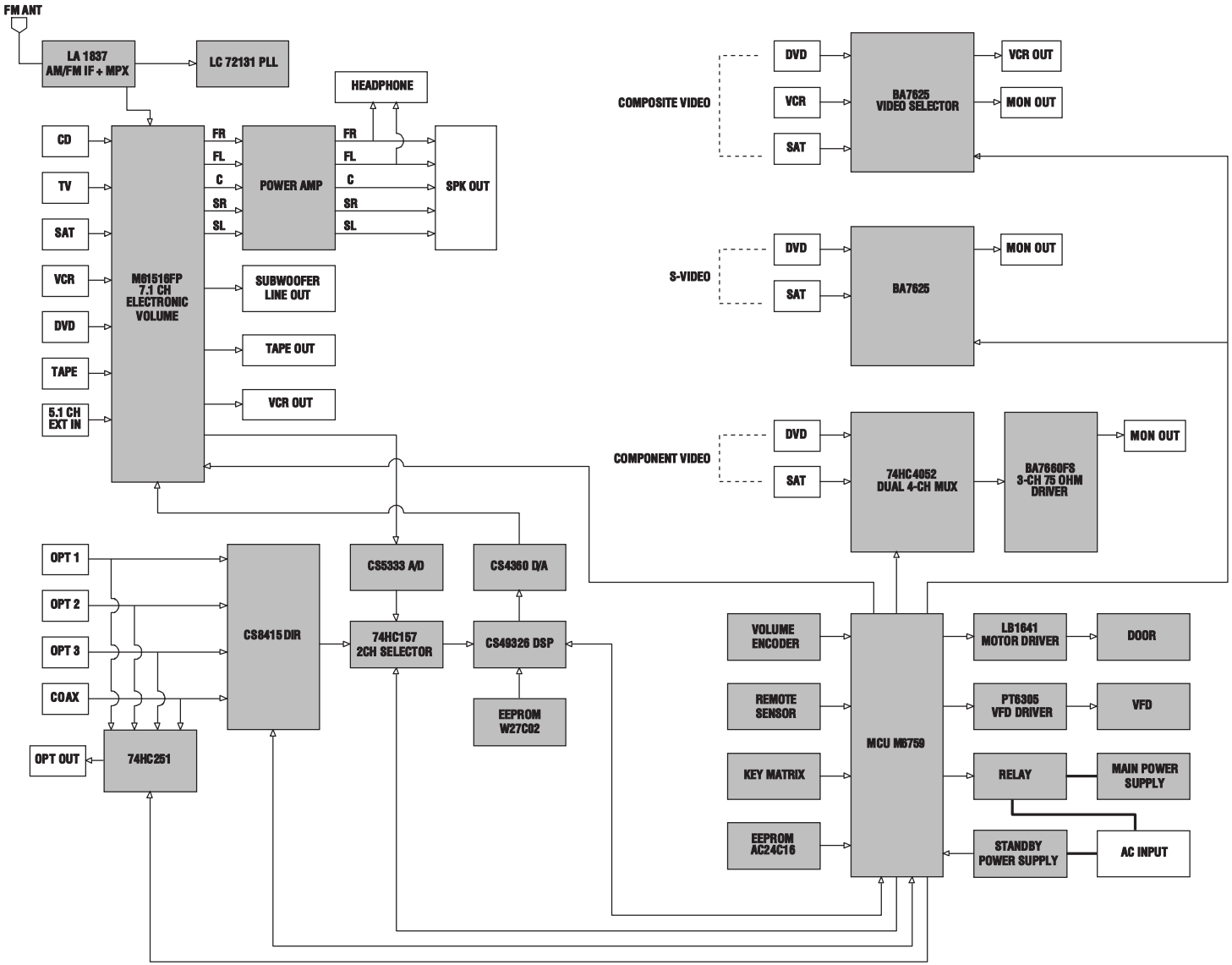
FEATURES	BENEFITS
DTS & Dolby Digital ® and Dolby Prologic II ® Decoder	To enjoy the latest cinema sound technologies
DVD Audio & SACD ready with large bandwidth	To fully enjoy multi-channel DVD-Audio / SACD sound
THD rate : 0,09%	For ultra-high fidelity sound
Highest audio quality thanks to audiophile grade component	For outstanding HiFi sound while playing DVD-Audio or SACD (24 bit / 192 kHz DAC)
Motorized panel door & stylish Scenium design	For more convenience and better home integration
Multibrand & multiproduct Navilight remote control	Just one remote control to drive all your audio / Video equipment, even if it's not a Thomson one
Full digital / Y / Cb / Cr connections	For highest quality and for connecting compatible devices

THOMSON SCENIUM

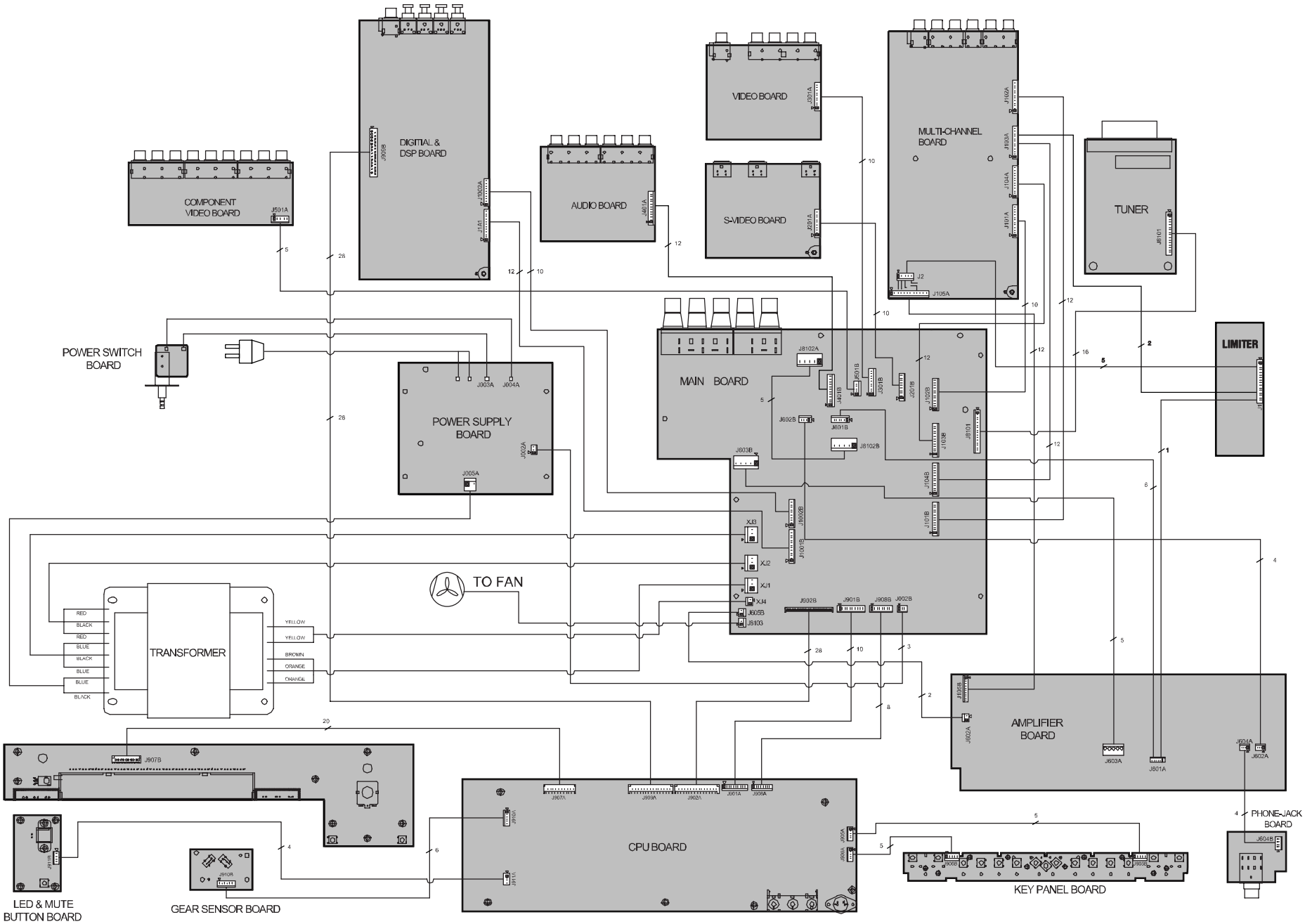
DPL 4000

Technical Data :

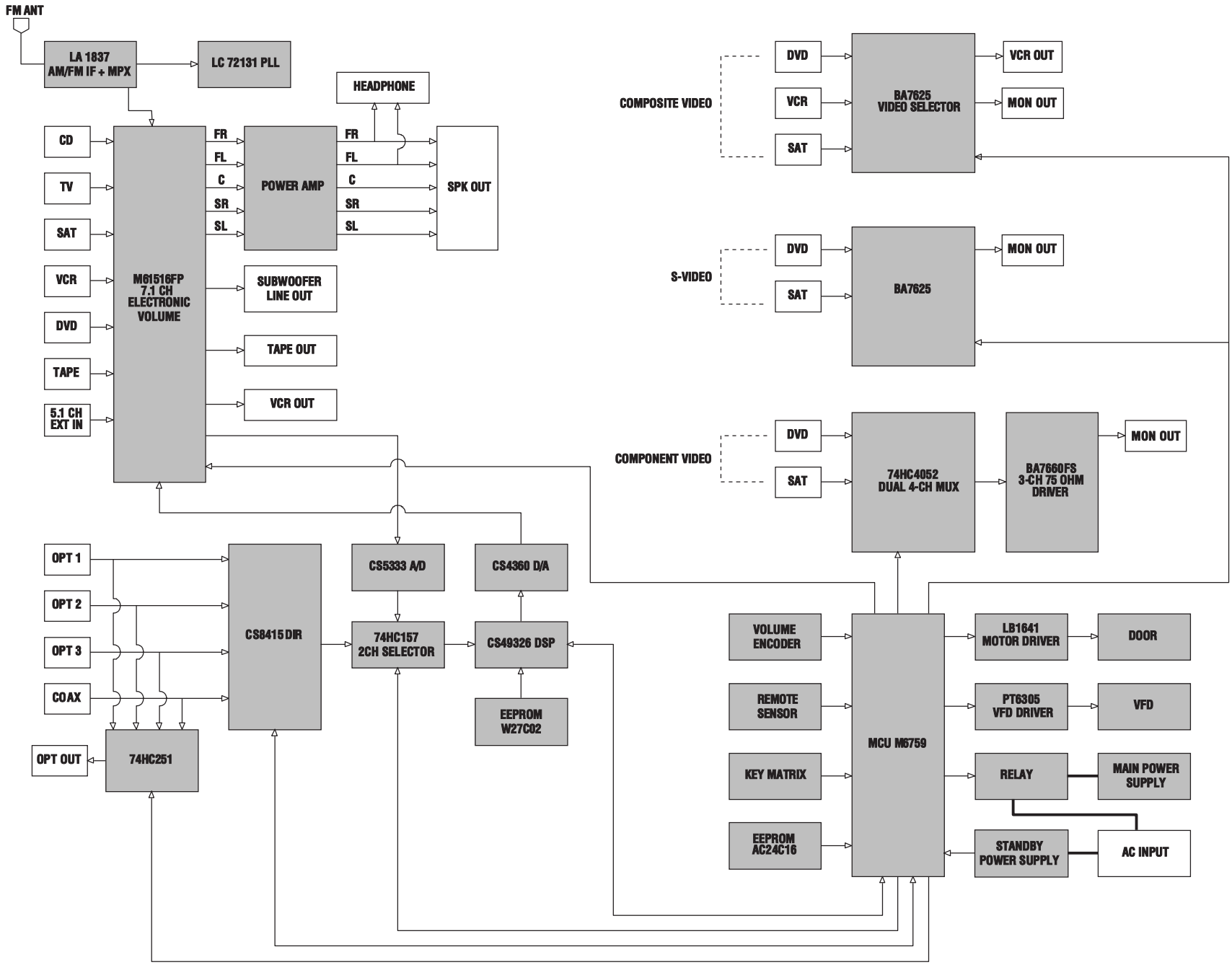
BRAND	
Brand	SCENIUM
TUNER	
Tuner type	Digital
Presets	40
FM frequency	87.5 MHz - 108 MHz
MW frequency	522 - 1620 kHz
LW frequency	150 - 283 kHz
R.D.S. / EON	Yes/-
R.D.S. functions	PTY/Radiotext/Clock/Station name
Scanning system	manual + auto
Memory system	manual + auto
AMPLIFIER	
Amplification type	Class A / B
DPL / DPL II	Yes / Yes
DD / DTS	Yes / Yes
Total output power (RMS)	550
Left / Right output power (2x)	2 x 110
Center output power (1x)	110
Left / Right Rear output power (2 x)	2 x 110
Subwoofer output power	-
THD (%)	0.09
Surround Sound	Yes
Equalizer presets	5
Bandwidth	10Hz - 80 kHZ @ - 3 db
DSP	6
Mute on / off	Yes
Volume Control	Digital control: rotary
Sound enhancement	Yes
Mode	Phantom / Wide / Normal
Test signal	Yes
Jog shuttle	-
SPEAKERS BOX	
LEFT / RIGHT SPEAKERS	
Way number	-
Impedance (Ohms)	-
Power efficiency (W)	-
Magnetically shielded	-
Connexion	-
Wall mounted	-
CENTER SPEAKERS	
Way number	-
Impedance (Ohms)	-
Power efficiency (W)	-
Magnetically shielded	-
Connexion	-
Wall mounted	-
REAR SPEAKERS	
Way number	-
Impedance (Ohms)	-
Power efficiency (W)	-
Magnetically shielded	-
Connexion	-
Wall mounted	-
SUBWOOFER	
Passive / active	-
Speaker drivers	-
Frequency range	-
CONNECTION / POWER SUPPLY	
AC power	230 V / 50 Hz
5 + 1 Ready	Yes
DVD-Audio & SACD Ready	Yes
Y / Cb / Cr IN / OUT	2 / 1
SCART	-
SUB OUT	Yes
Audio IN / Audio OUT	7 / 2
Video IN / Video OUT	4 / 2
S-Video IN / OUT	2 / 1
Digital IN (coaxial / optical)	1 / 3
Digital OUT (optical)	1
Main speakers connection	Screws
Surround connections	Screws
Headphone jack	6.35 mm
FM / AM Antenna	Yes / Yes
USER INTERFACE	
Display type	VFD
Display color	Bluish white
Backlit display	Yes
Dimmer (nber steps)	3
Sleep Timer (min)	120
Clock	-
Wake-Up Mode	-
Help mode	-
Panel Control	Digital
Remote control	Navilight Universal
COLOUR	
Colour	Silver
GENERAL DATA	
Power cable	Fixed
Power consumption (1/8 rating power/Ma)	350 W
Standby mode consumption	< 3 W
Dimensions (W x H x D) main unit / Weigh	430 x 150 x 400 / 14 kg
Dimensions (W x H x D) subwoofer / Weigh	-
Dimensions (W x H x D) center speaker/W	-
Dimensions (W x H x D) L&R and surround	-
Packaging dimensions (W x H x D) in mm	570 x 234 x 545
EAN 13 code	3244480103630
Gross Weight in Kg	15.5
ACCESSORIES	
Cables	Audio / Video, Speakers
Antenna	FM cable / AM Loop
Batteries	AA type x 2

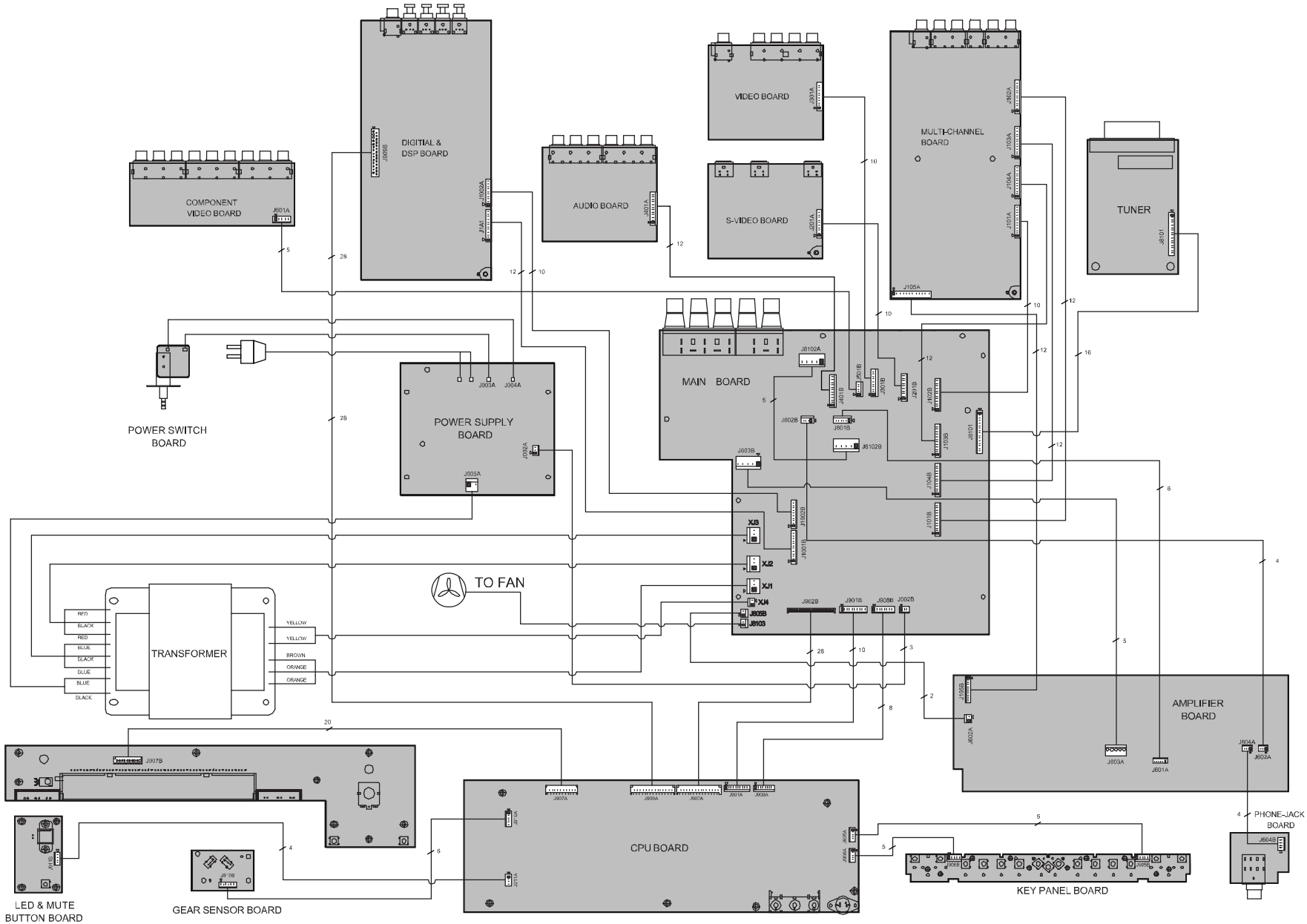

FM ANT
LA 1837
AM/FM IF + MPX
LC 72131 PLL
HEADPHONE
CD
TV
SAT
VCR
DVD
TAPE
5.1 CH
EXT IN
M61516FP
7.1 CH
ELECTRONIC
VOLUME
FR
FL
C
SR
SL
POWER AMP
FR
FL
C
SR
SL
SPK OUT
SUBWOOFER
LINE OUT
TAPE OUT
VCR OUT
COMPOSITE VIDEO
DVD
VCR
SAT
BA7625
VIDEO SELECTOR
VCR OUT
MON OUT
S-VIDEO
DVD
SAT
BA7625
MON OUT
COMPONENT VIDEO
DVD
SAT
74HC4052
DUAL 4-CH MUX
BA7660FS
3-CH 75 OHM
DRIVER
MON OUT
OPT 1
OPT 2
OPT 3
COAX
OPT OUT
74HC251
CS8415 DIR
CS5333 A/D
74HC157
2CH SELECTOR
CS4360 D/A
CS49326 DSP
EEPROM
W27C02
VOLUME
ENCODER
REMOTE
SENSOR
KEY MATRIX
EEPROM
AC24C16
MCU M6759
LB1641
MOTOR DRIVER
DOOR
PT6305
VFD DRIVER
VFD
RELAY
MAIN POWER
SUPPLY
STANDBY
POWER SUPPLY
AC INPUT

WIRING DIAGRAM - SCHEMA D'INTERCONNEXIONS - VERDRAHTUNGSPLAN - DIAGRAMMA DELLE INTERCONNESSIONI - ESQUEMA DE INTERCONEXIONES

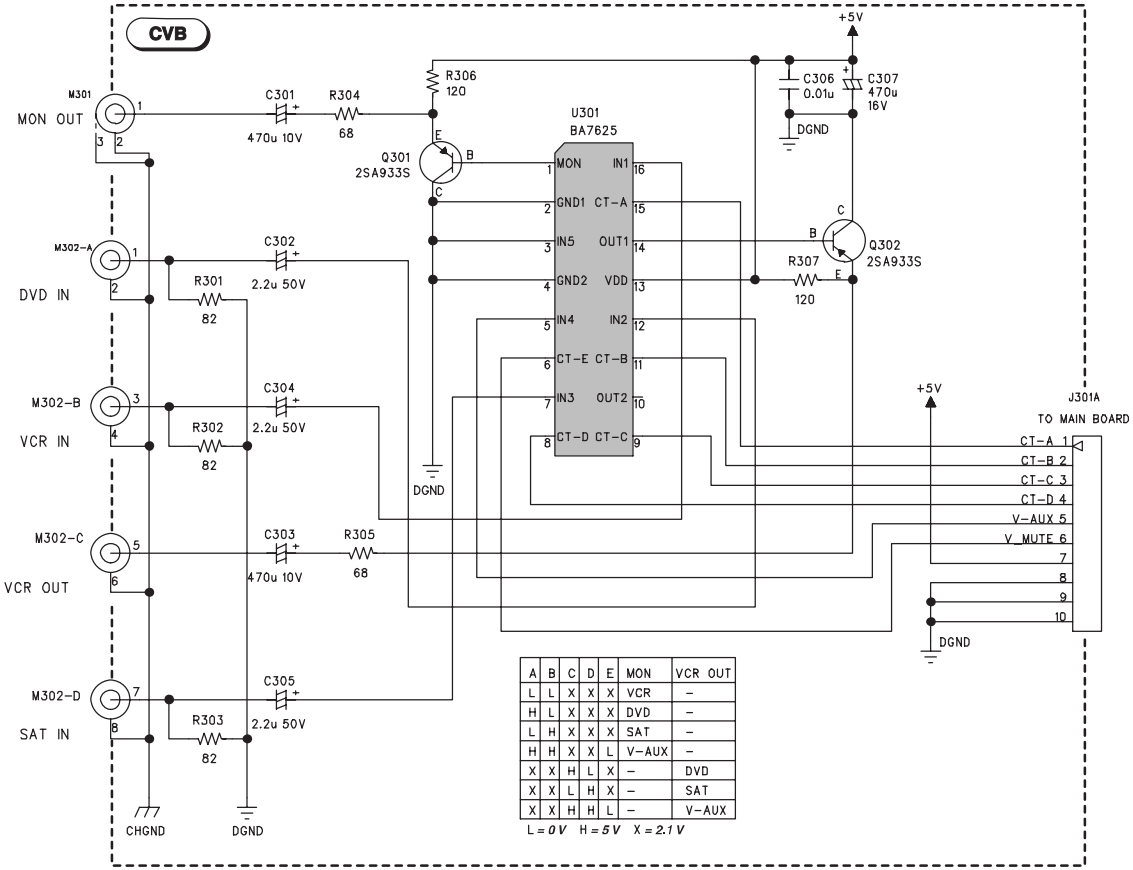


BLOCK DIAGRAM - SCHEMA SYNOPTIQUE - BLOCKSCHALTBILD - SCHEMA A BLOCCHI - ESQUEMA DE BLOQUES



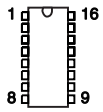

COMPONENT VIDEO BOARD
DIGITAL & DSP BOARD
AUDIO BOARD
VIDEO BOARD
S-VIDEO BOARD
MULTI-CHANNEL BOARD
TUNER
POWER SWITCH BOARD
POWER SUPPLY BOARD
MAIN BOARD
TO FAN
TRANSFORMER
AMPLIFIER BOARD
CPU BOARD
KEY PANEL BOARD
PHONE-JACK BOARD
LED & MUTE BUTTON BOARD
GEAR SENSOR BOARD

VIDEO PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT VIDEO - SCHALTBILD VIDEOSIGNALVERARBEITUNG - SCHEMA ELABORAZIONE VÍDEO - ESQUEMA DEL TRATAMIENTO VÍDEO (COMPOSITE VIDEO)



A	B	C	D	E	MON	VCR OUT
L	L	X	X	X	VCR	–
H	L	X	X	X	DVD	–
L	H	X	X	X	SAT	–
H	H	X	X	L	V–AUX	–
X	X	H	L	X	–	DVD
X	X	L	H	X	–	SAT
X	X	H	H	L	–	V–AUX

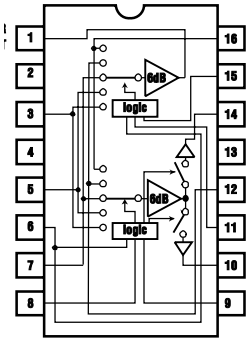
L = 0 V H = 5 V X = 2.1 V



BA7625

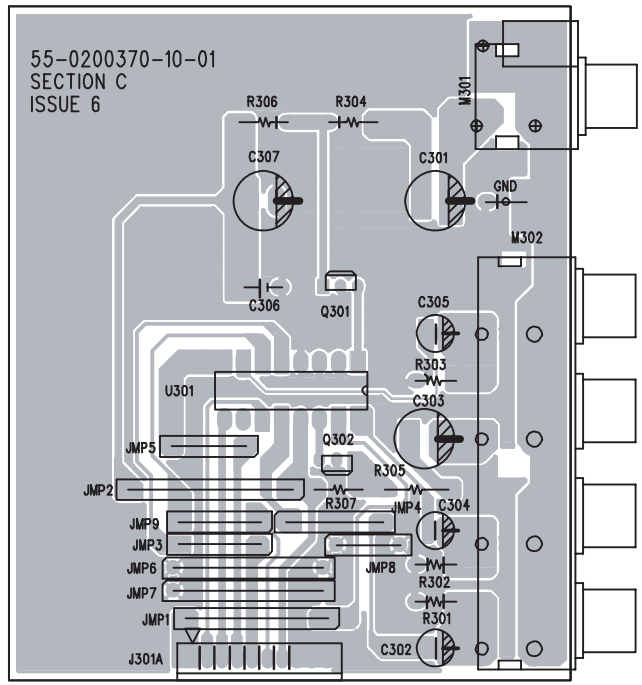
2SA933S

U301 BA7625

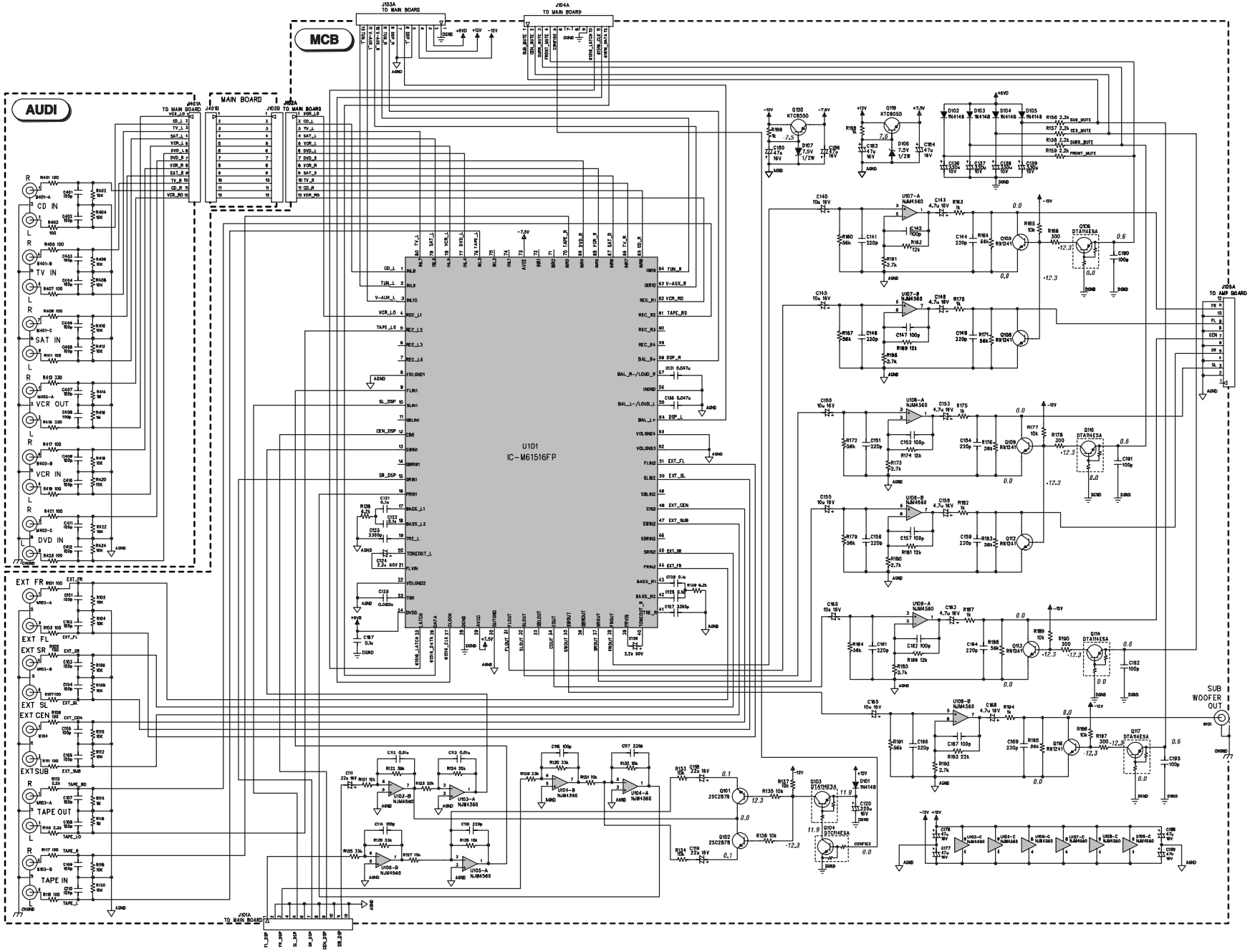


Video processing P.C.B.
Platine traitement vidéo
Ltpl. Videosignalverarbeitung
Piastra elaborazione video
Platina del tratamiento vídeo

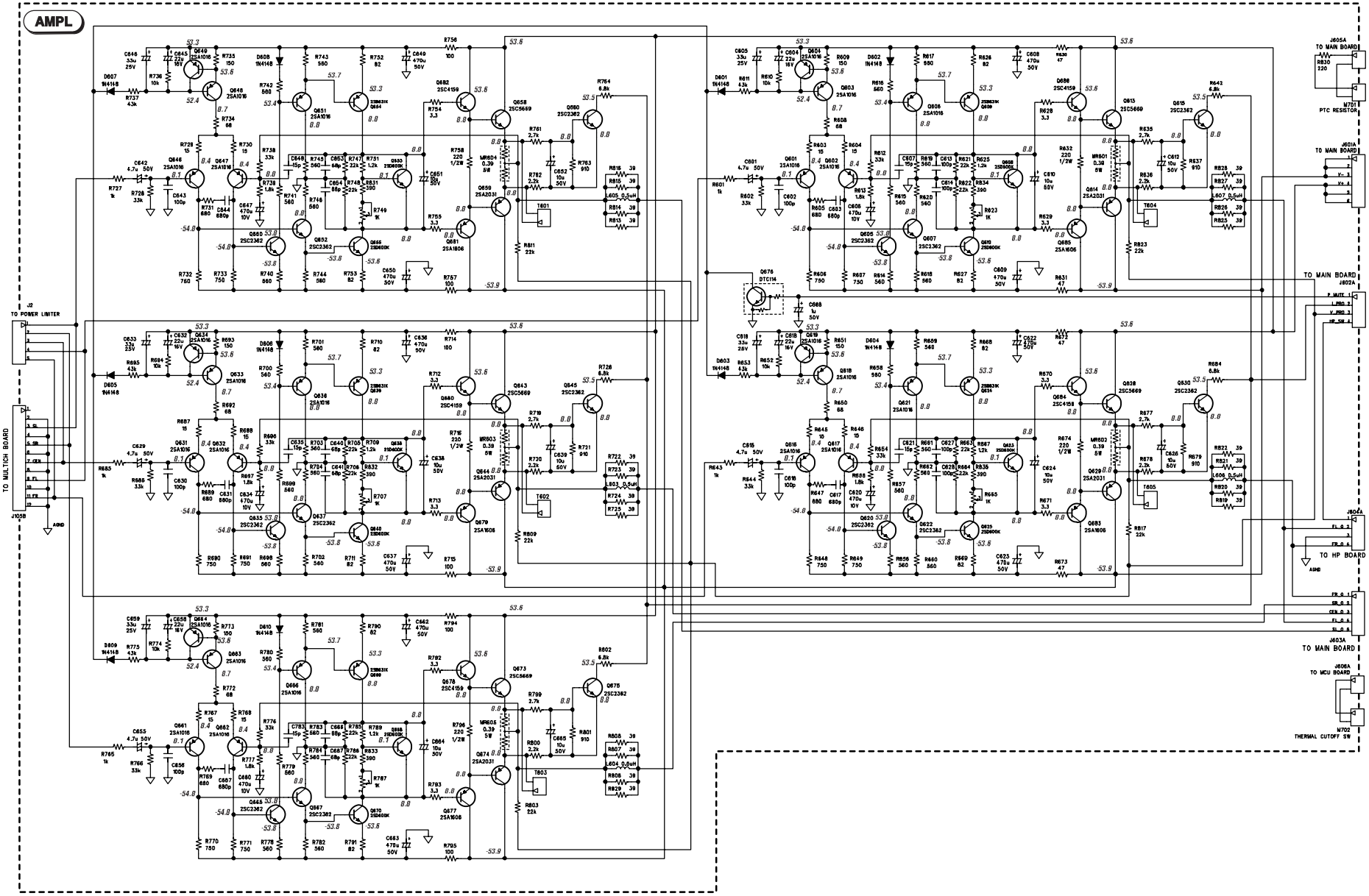
composite video



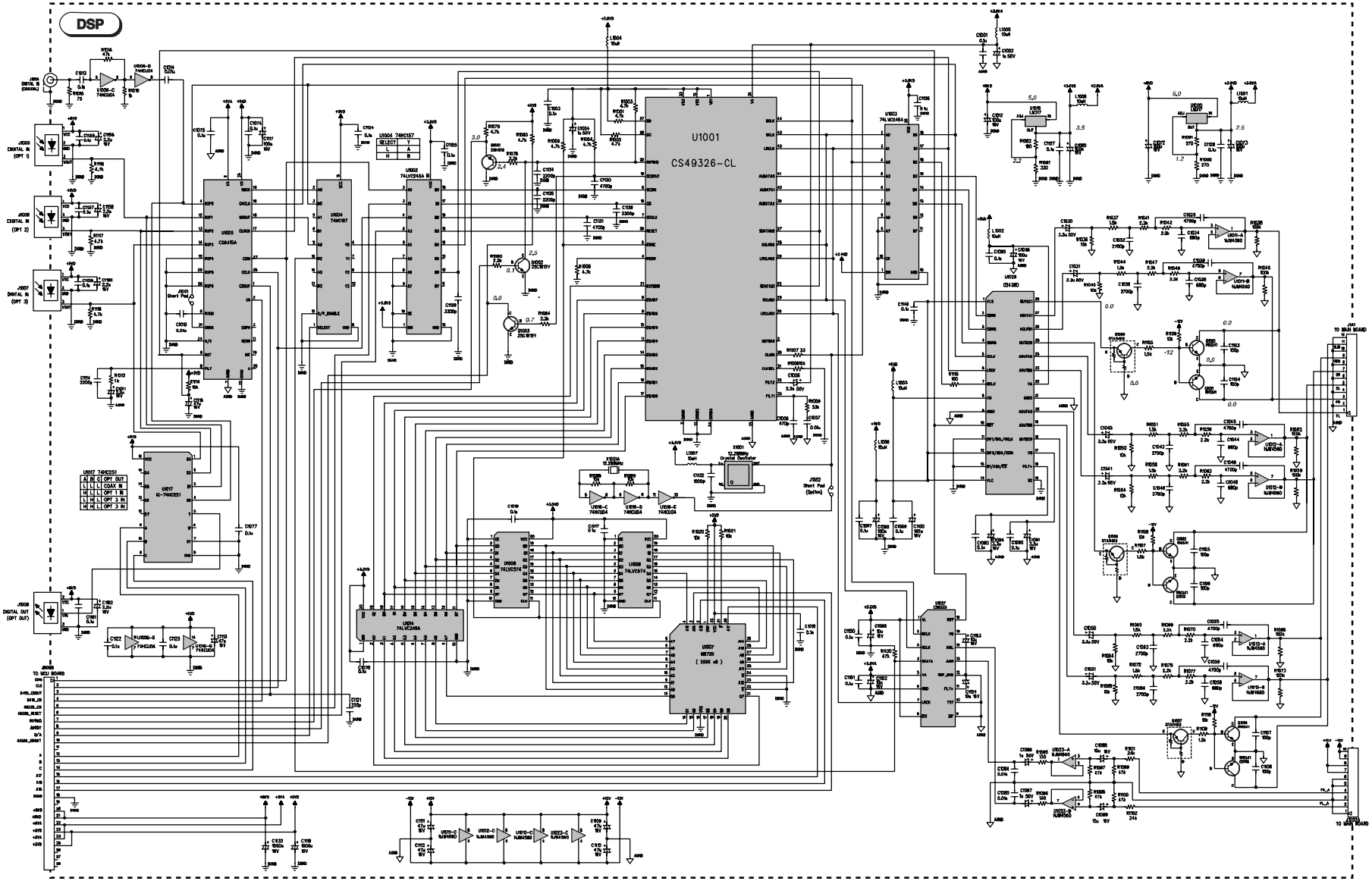
AUDIO PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT AUDIO - SCHALTBILD AUDIOSIGNALVERARBEITUNG - SCHEMA ELABORAZIONE AUDIO - ESQUEMA DEL TRATAMIENTO AUDIO



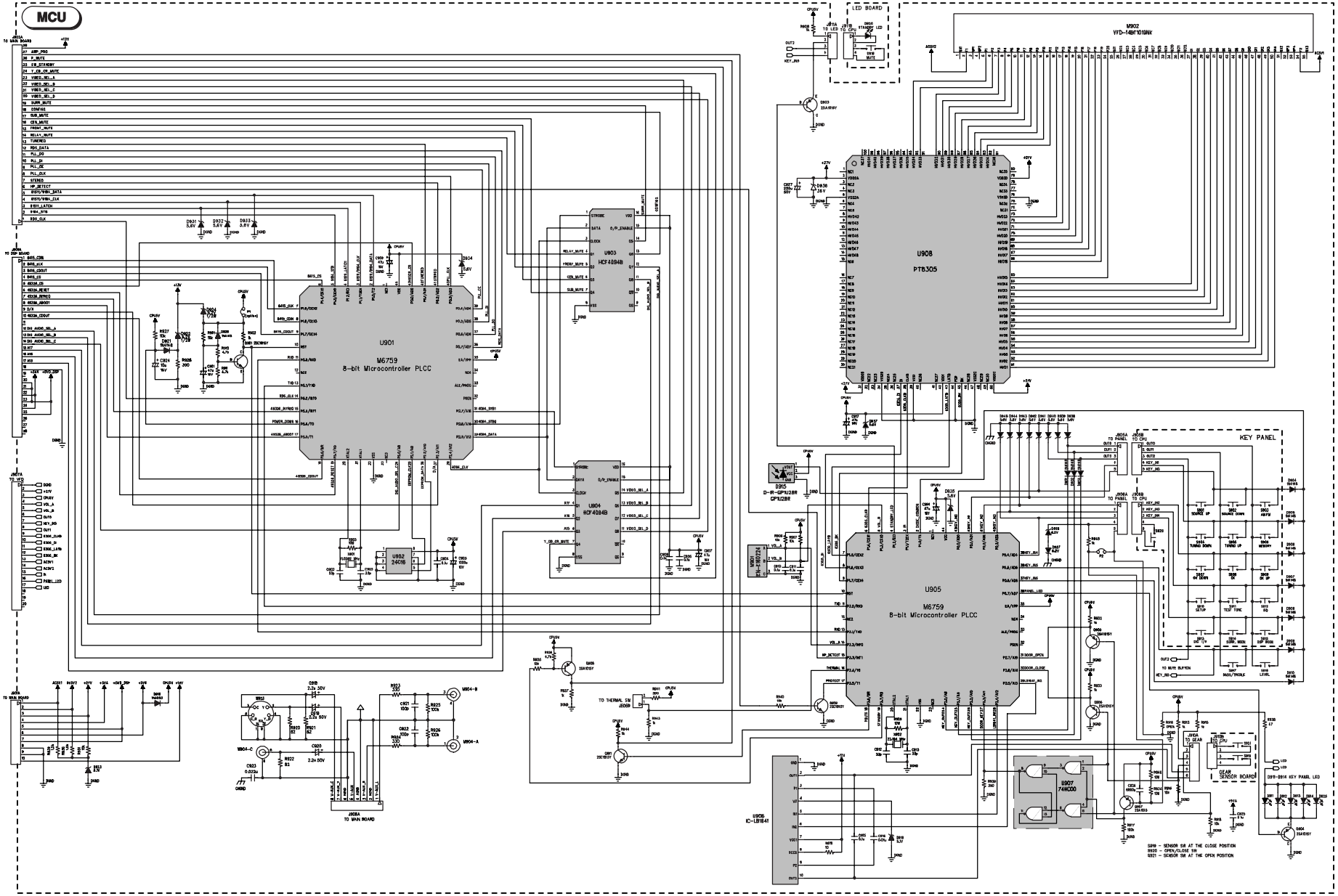
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD ENDVERSTÄRKER - SCHEMA DEL AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR



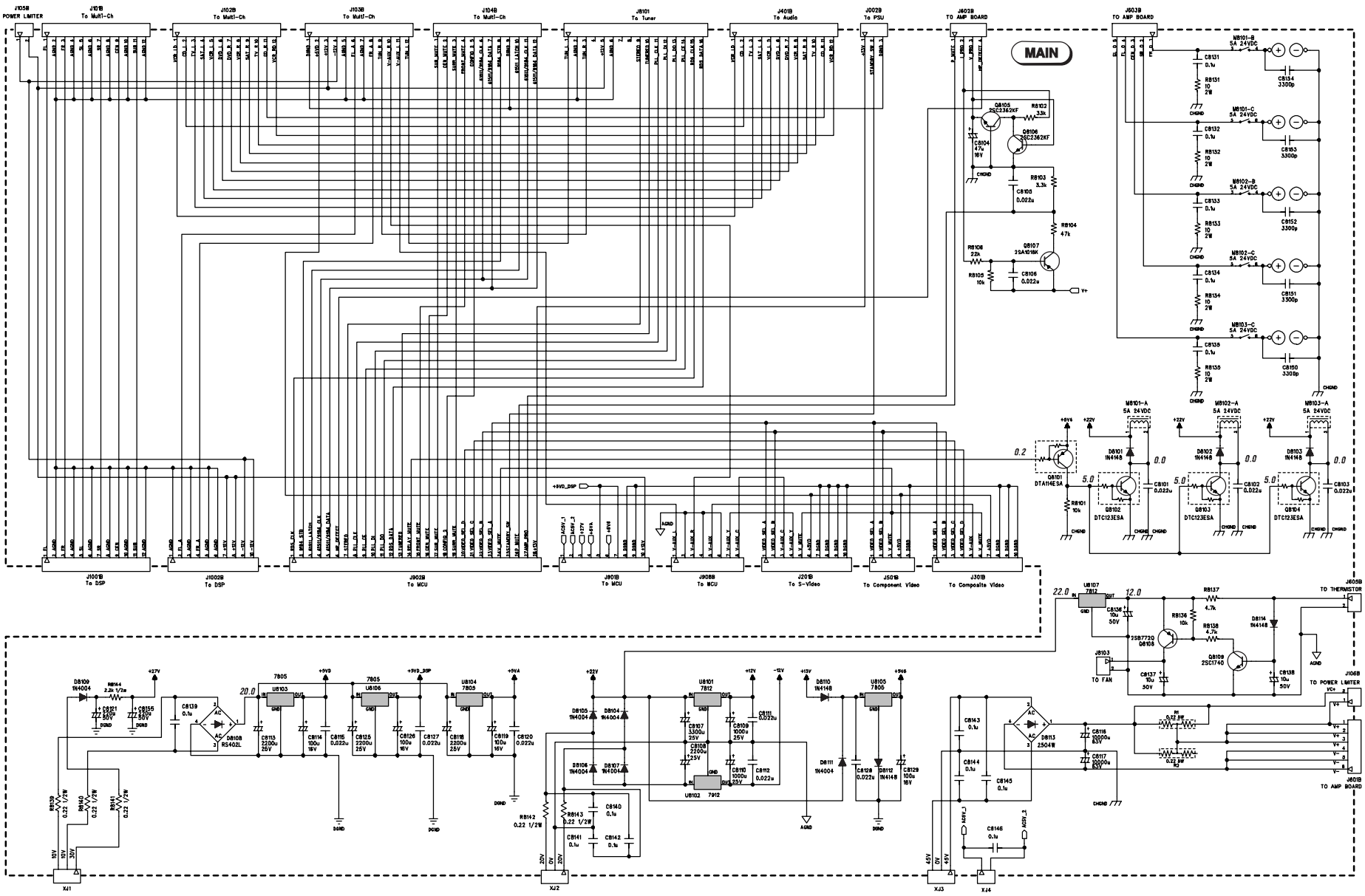
DIGITAL PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT DIGITAL - SCHALTBILD DIGITALVERARBEITUNG - SCHEMA ELABORAZIONE DIGITALE - ESQUEMA DEL TRATAMIENTO DIGITAL



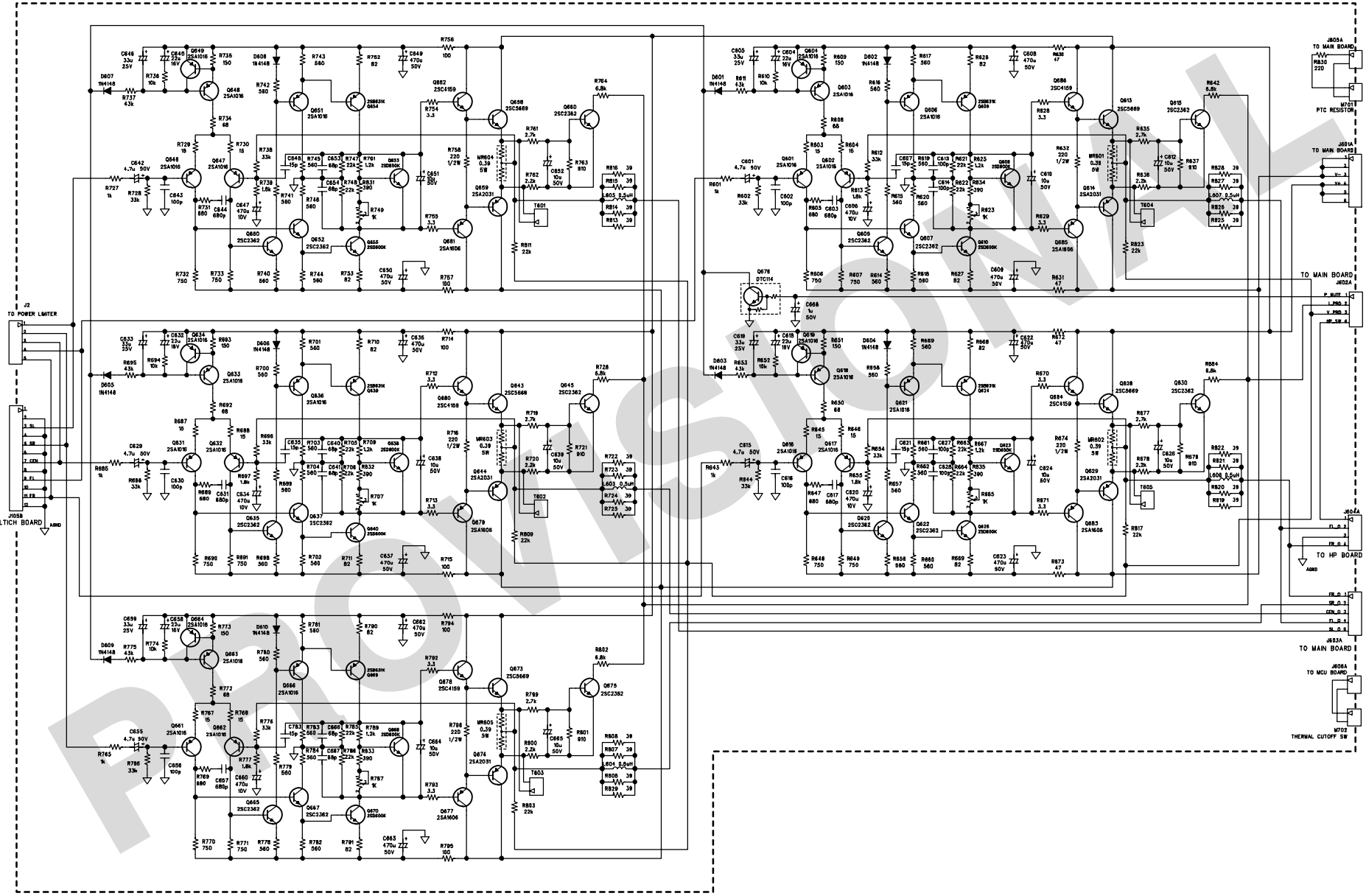
MICROCONTROLLER SCHEMATIC DIAGRAM - SCHEMA MICROCONTROLEUR - SCHALTBILD MICROCONTROLLERSTUFEN - SCHEMA MICROPROCESSORE - ESQUEMA MICROCONTROLADOR

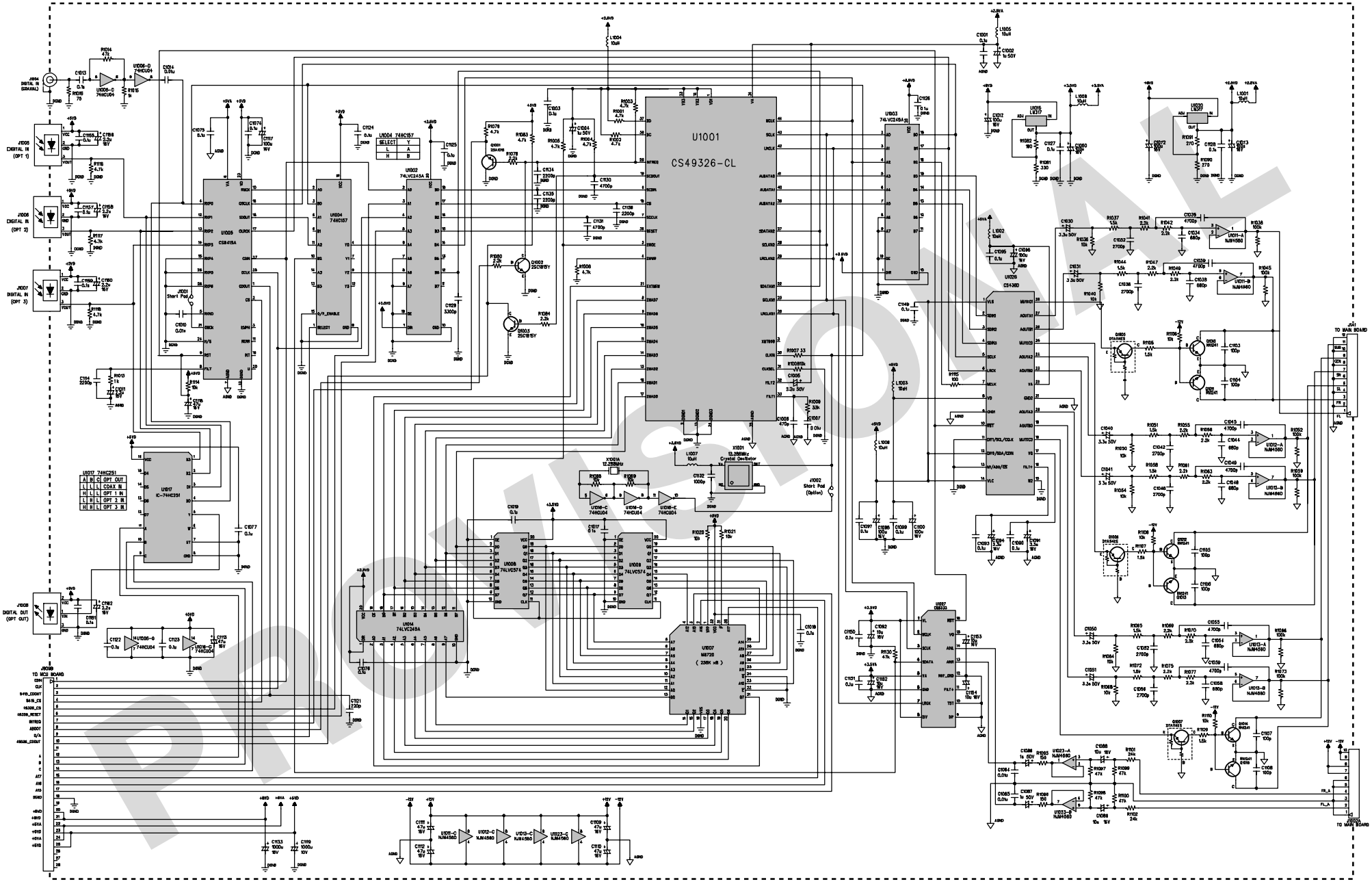


MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - GRUNDPLATTE SCHALTBILD - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL



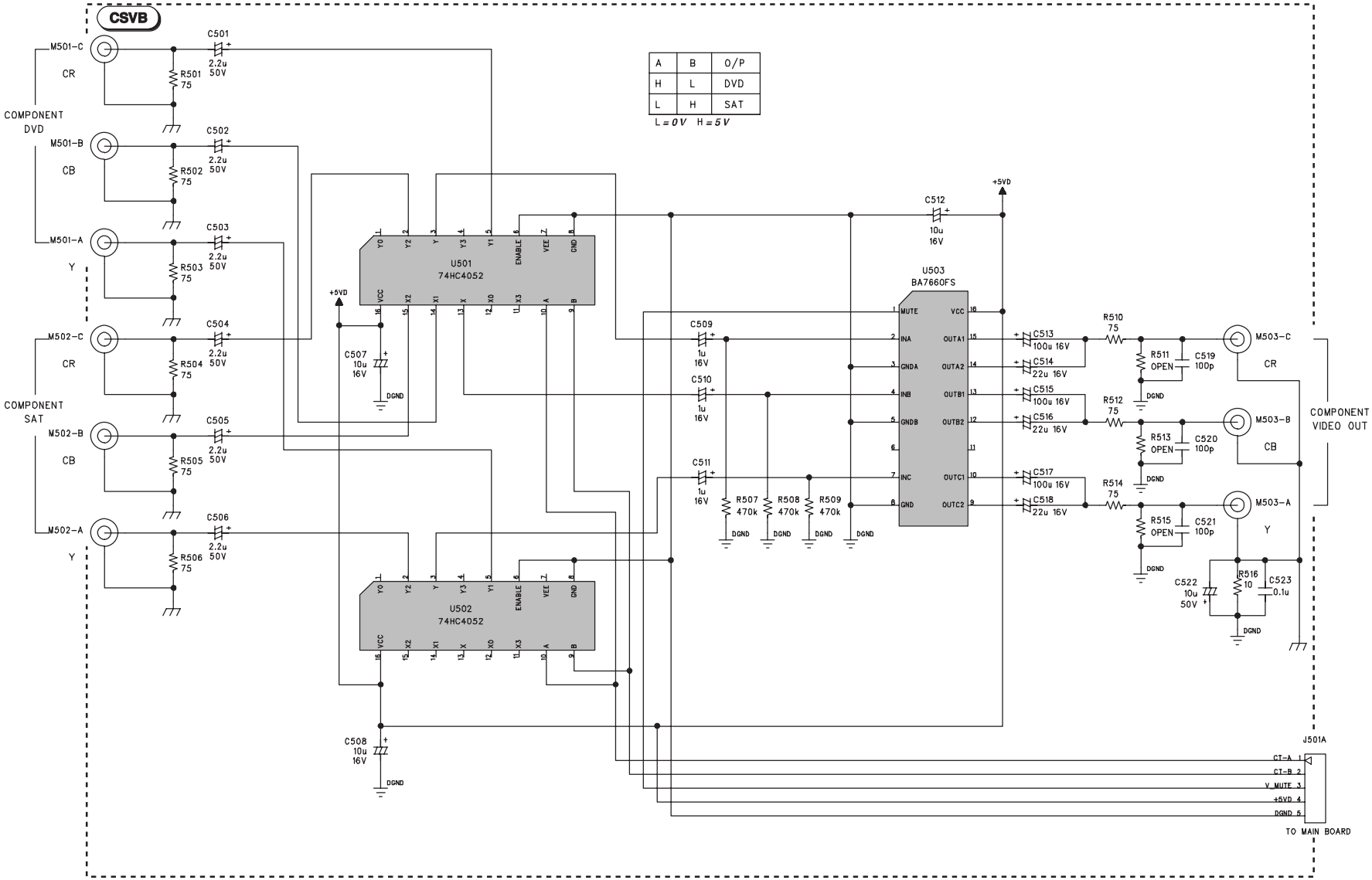
AMPLIFIER SCHEMATIC DIAGRAM



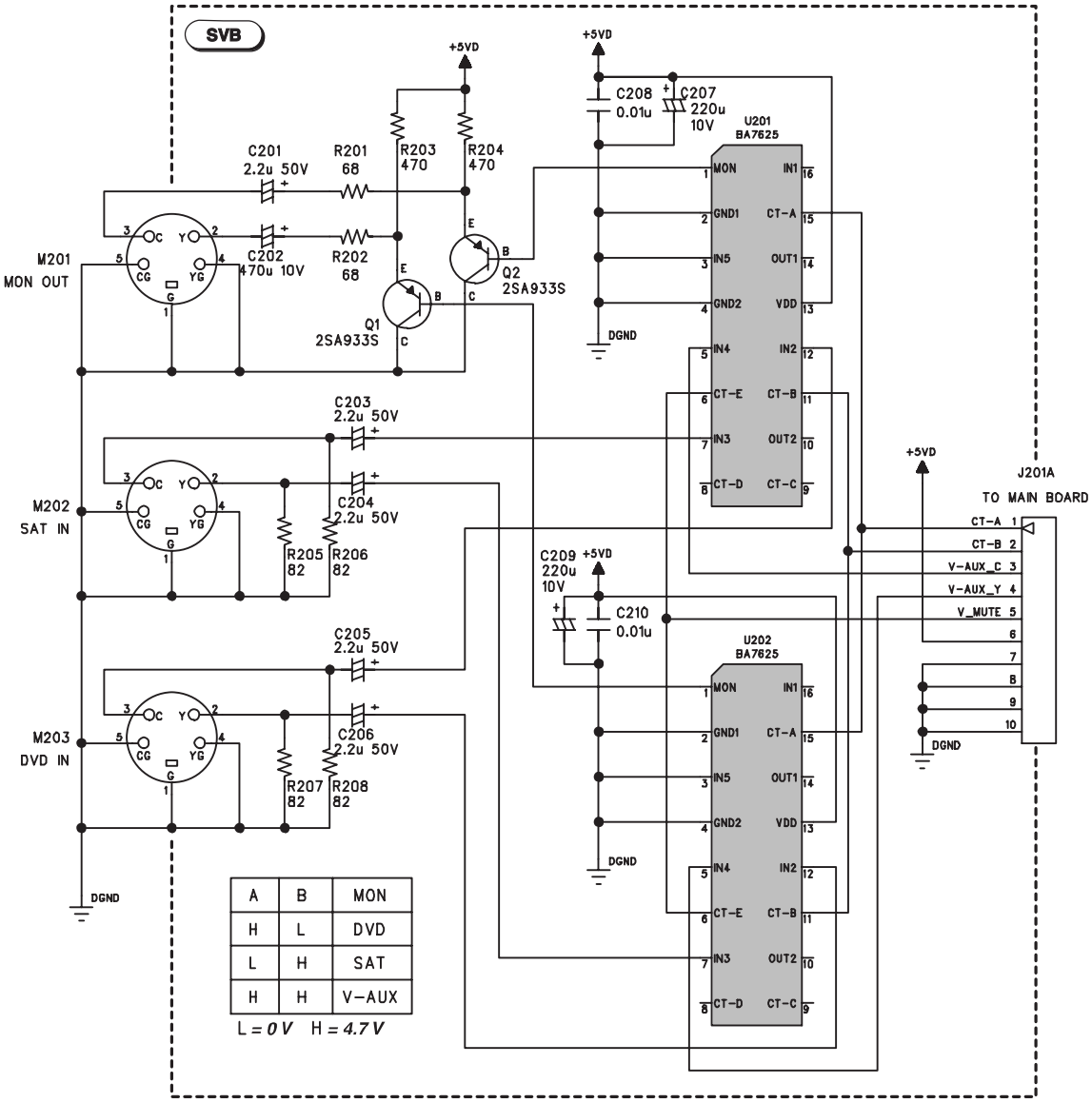


PROVISIONAL

VIDEO PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT VIDEO - SCHALTBILD VIDEOSIGNALVERARBEITUNG - SCHEMA ELABORAZIONE VÍDEO - ESQUEMA DEL TRATAMIENTO VÍDEO (COMPONENT VIDEO)

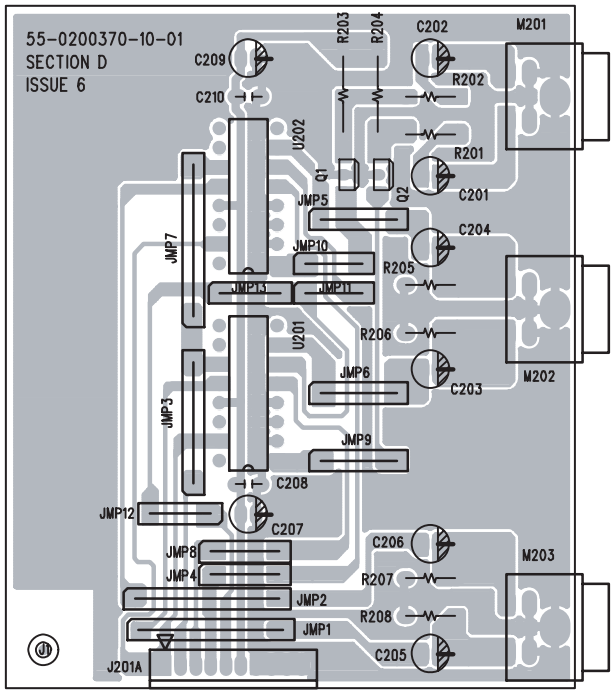


VIDEO PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT VIDEO - SCHALTBILD VIDEOSIGNALVERARBEITUNG - SCHEMA ELABORAZIONE VÍDEO - ESQUEMA DEL TRATAMIENTO VÍDEO (S-VIDEO)

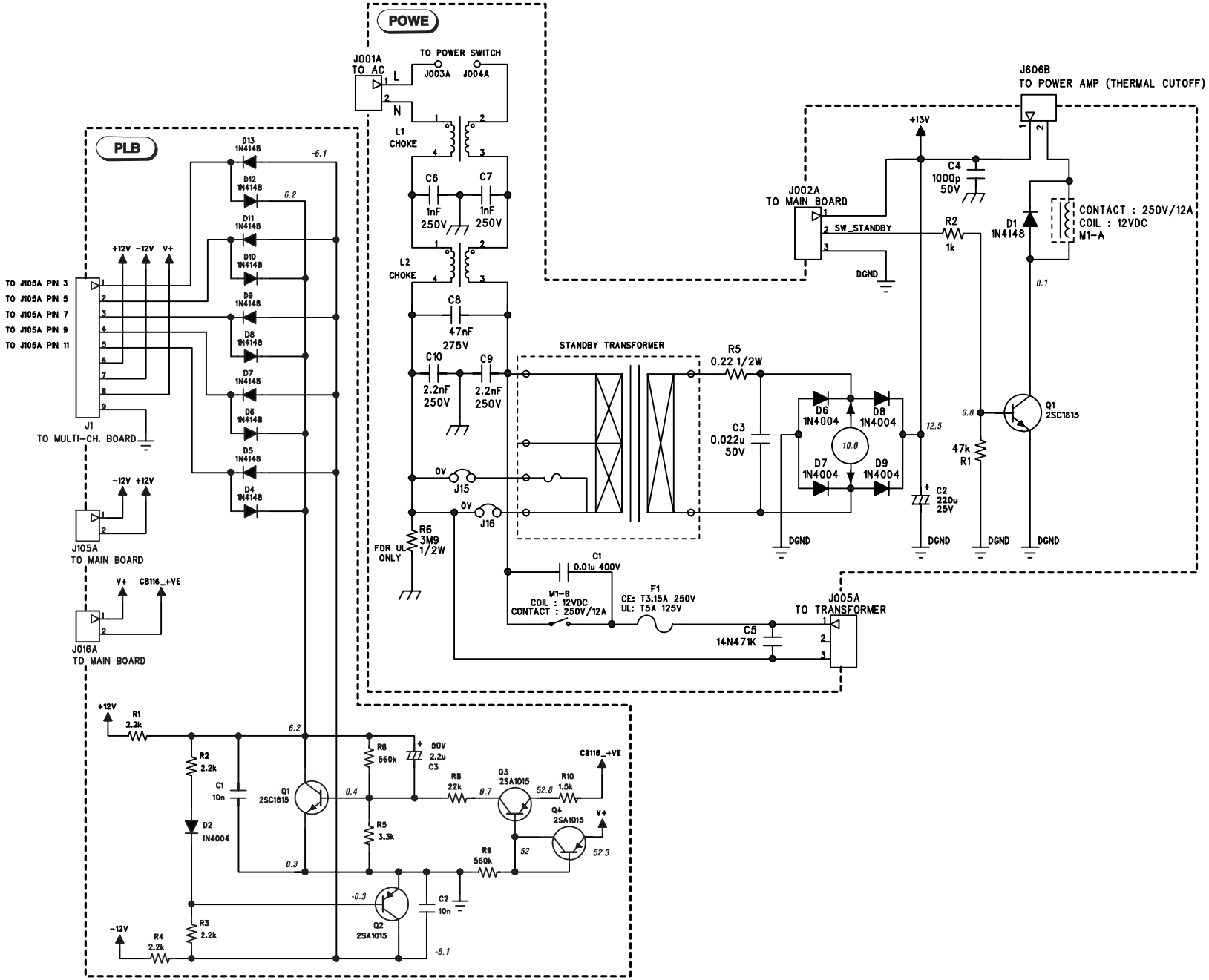


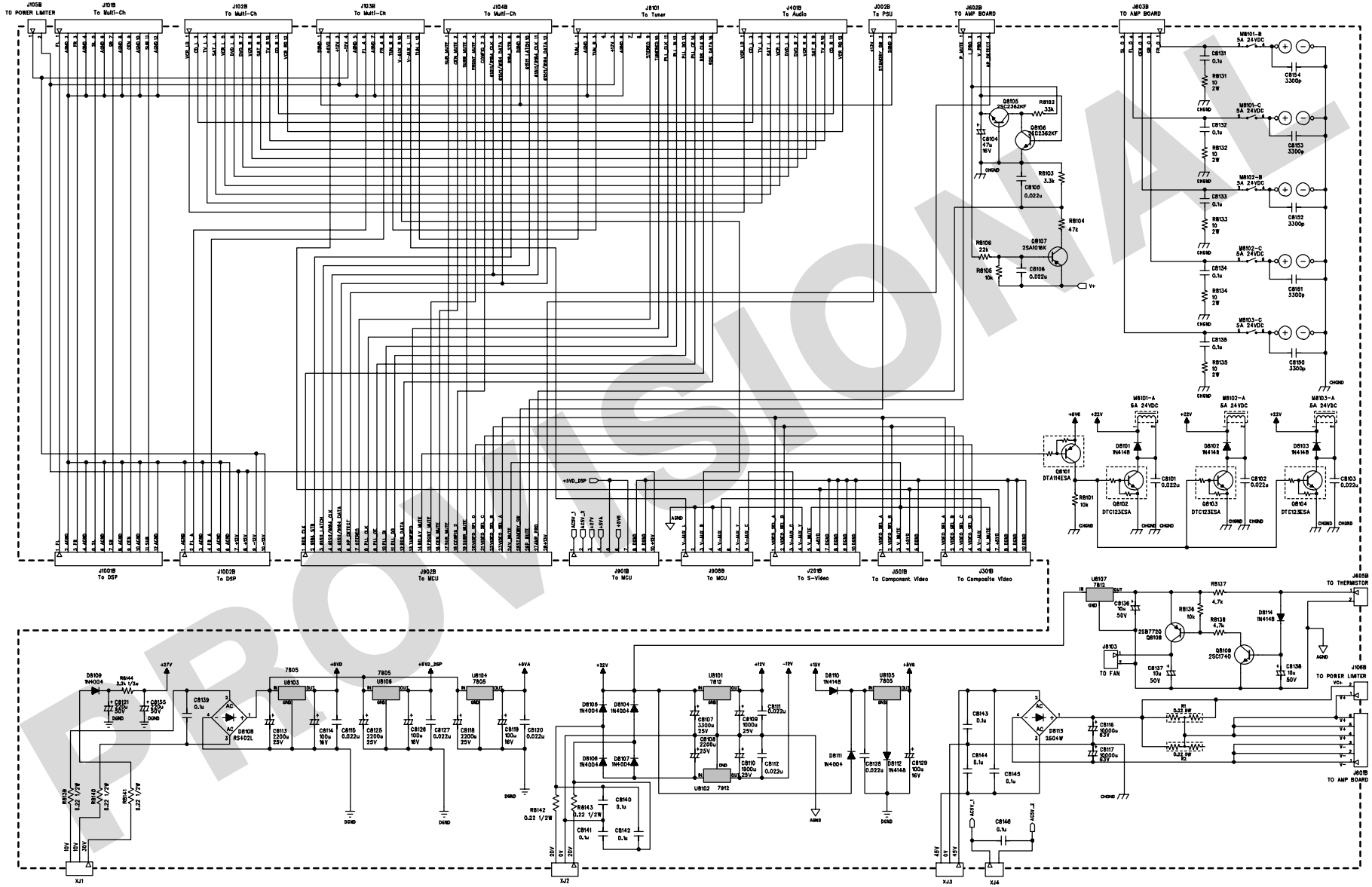
Video processing P.C.B.
Platine traitement vidéo
Ltpl. Videosignalverarbeitung
Piastra elaborazione video
Platina del tratamiento vídeo

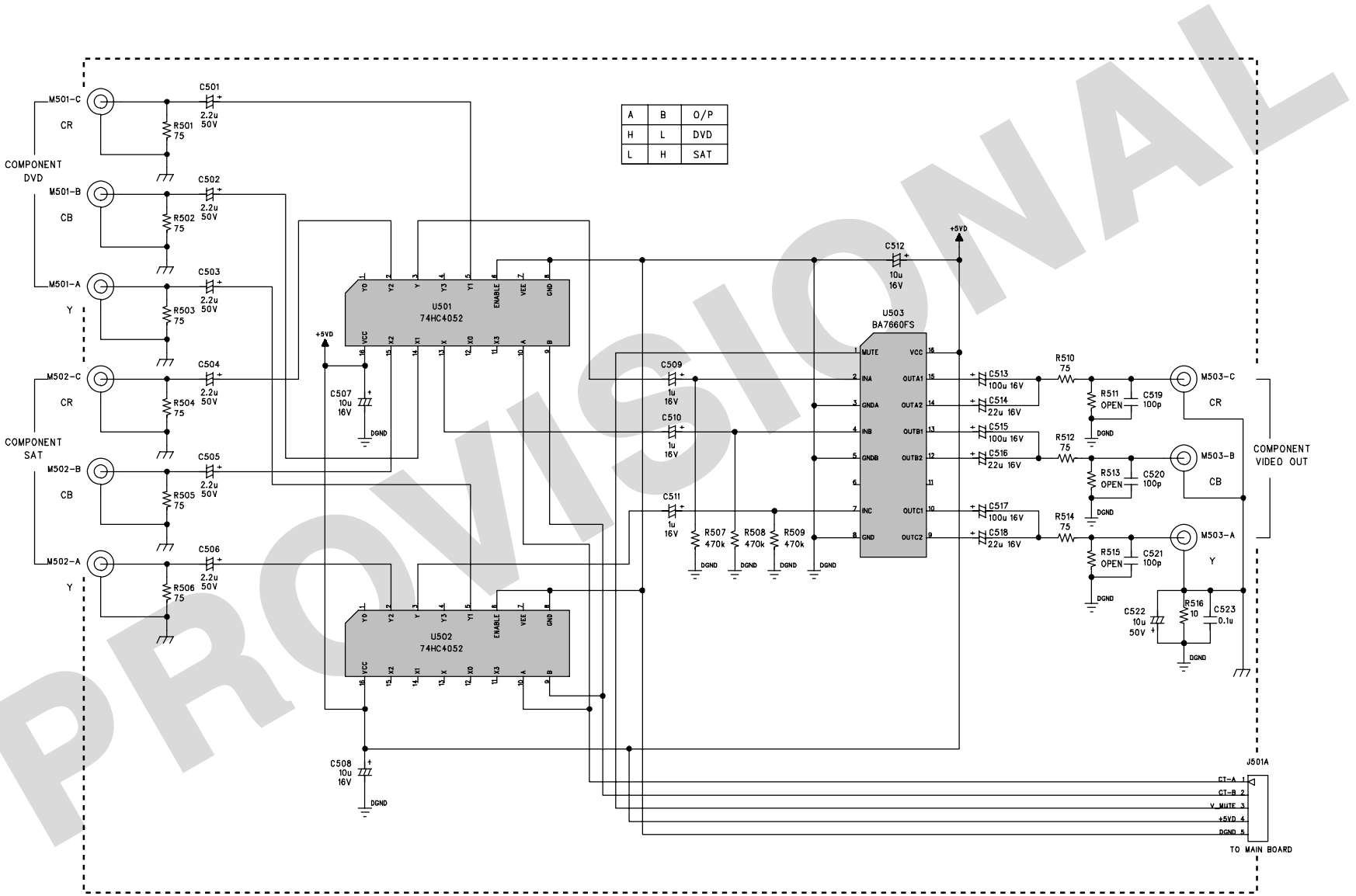
S- video



POWER SUPPLY SCHEMATIC DIAGRAM - SCHEMA DE L'ALIMENTATION - SCHALTBILD NETZTEIL - SCHEMA DELL' ALIMENTAZIONE - ESQUEMA DE LA ALIMENTACIÓN

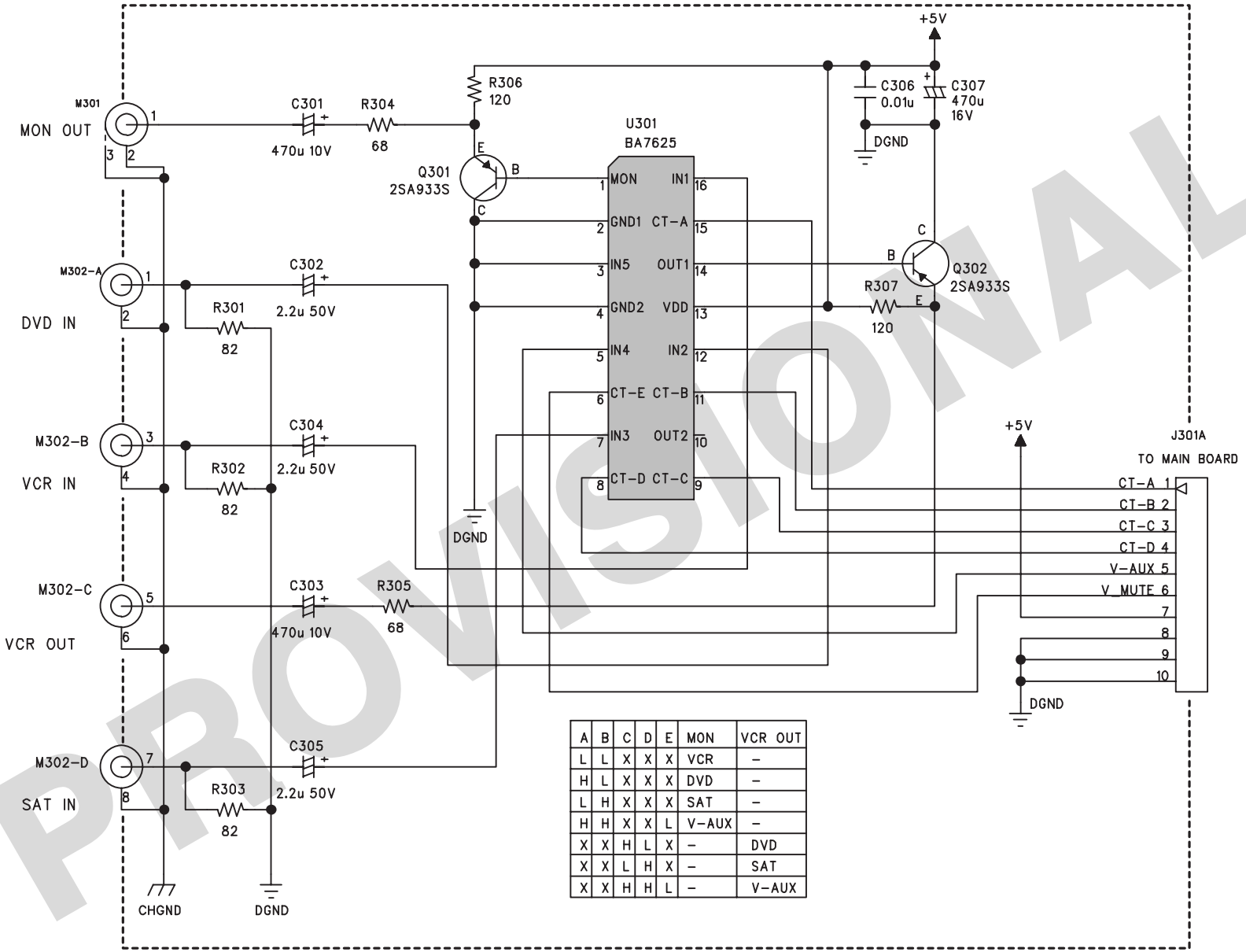



J105B
TO POWER LIMITER
J101B
To Multi-Ch
J102B
To Multi-Ch
J103B
To Multi-Ch
J104B
To Multi-Ch
J8101
To Tuner
J401B
To Audio
J002B
To PSU
J602B
TO AMP BOARD
J603B
TO AMP BOARD
J1001B
To DSP
J1002B
To DSP
J902B
To MCU
J901B
To MCU
J908B
To MCU
J291B
To S-Video
J501B
To Component Video
J301B
To Composite Video
J605B
TO THERMISTOR
J106B
TO POWER LIMITER
J603B
TO AMP BOARD
J8103
TO FAN
MB101-B
MB101-C
MB102-B
MB102-C
MB103-C
MB101-A
MB102-A
MB103-A
5A 24VDC
Q8105
2SC3362KF
Q8106
2SC3362KF
Q8107
2SA1018K
Q8101
DTA114ESA
Q8102
DTC123ESA
Q8103
DTC123ESA
Q8104
DTC123ESA
Q8108
2SB772S
Q8109
2SC1740
D8101
1N4148
D8102
1N4148
D8103
1N4148
D8104
1N4004
D8105
1N4004
D8106
1N4004
D8107
1N4004
D8108
RS402L
D8109
1N4004
D8110
1N4148
D8111
1N4004
D8112
1N4148
D8113
2504W
D8114
1N4148
U8101
7812
U8102
7912
U8103
7805
U8104
7805
U8105
7805
U8106
7805
U8107
7812
XJ1
XJ2
XJ3
XJ4
+27V
+8V
+8VD
+8VD_DSP
+8VA
+22V
-22V
+12V
-12V
+5V
+3V6
+3VD_DSP
DGND
AGND
CHGND
V+
V-
V1
V2
V3
V4
PROVISIONAL



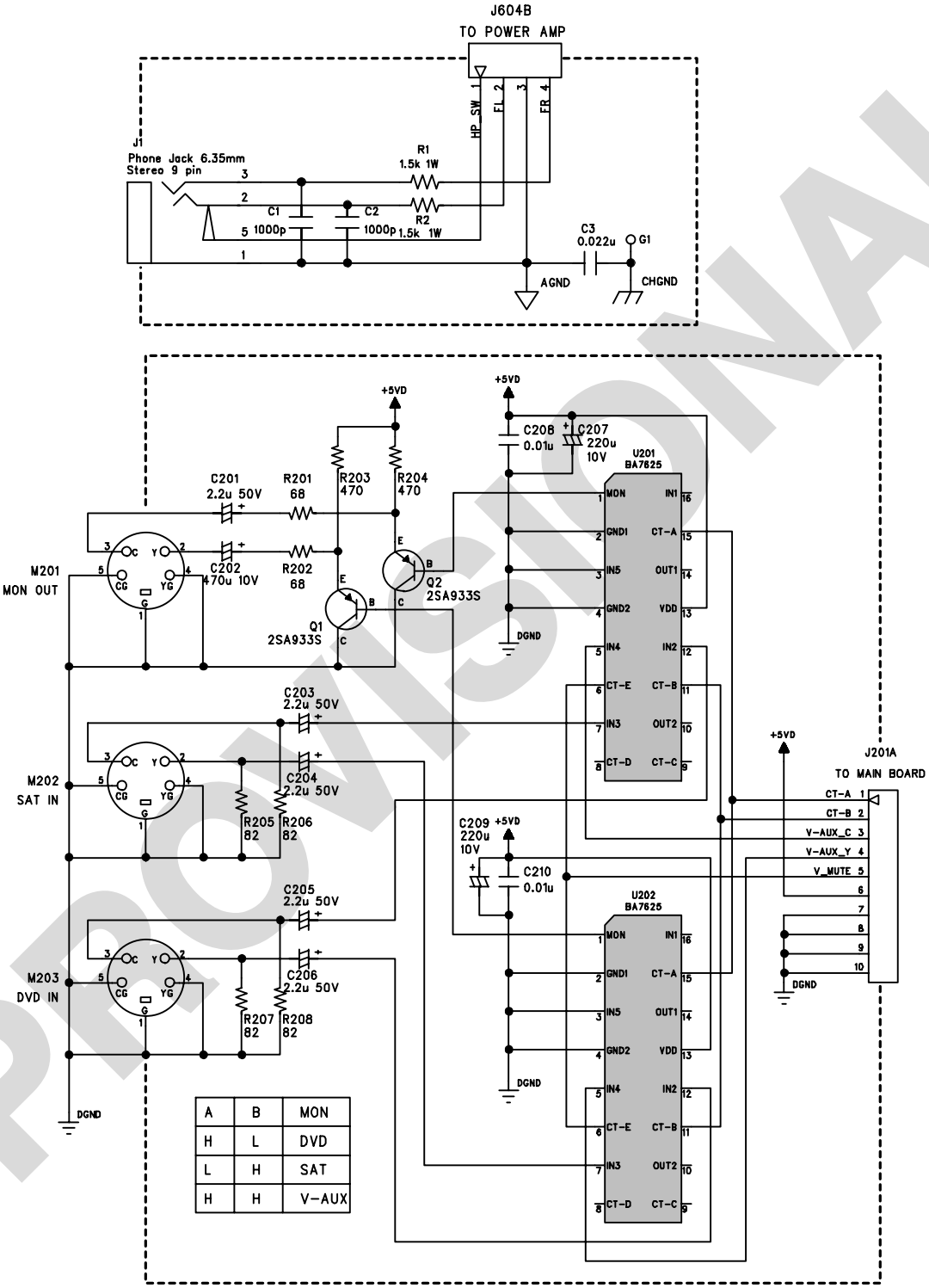
A	B	O/P
H	L	DVD
L	H	SAT

PROVISIONAL

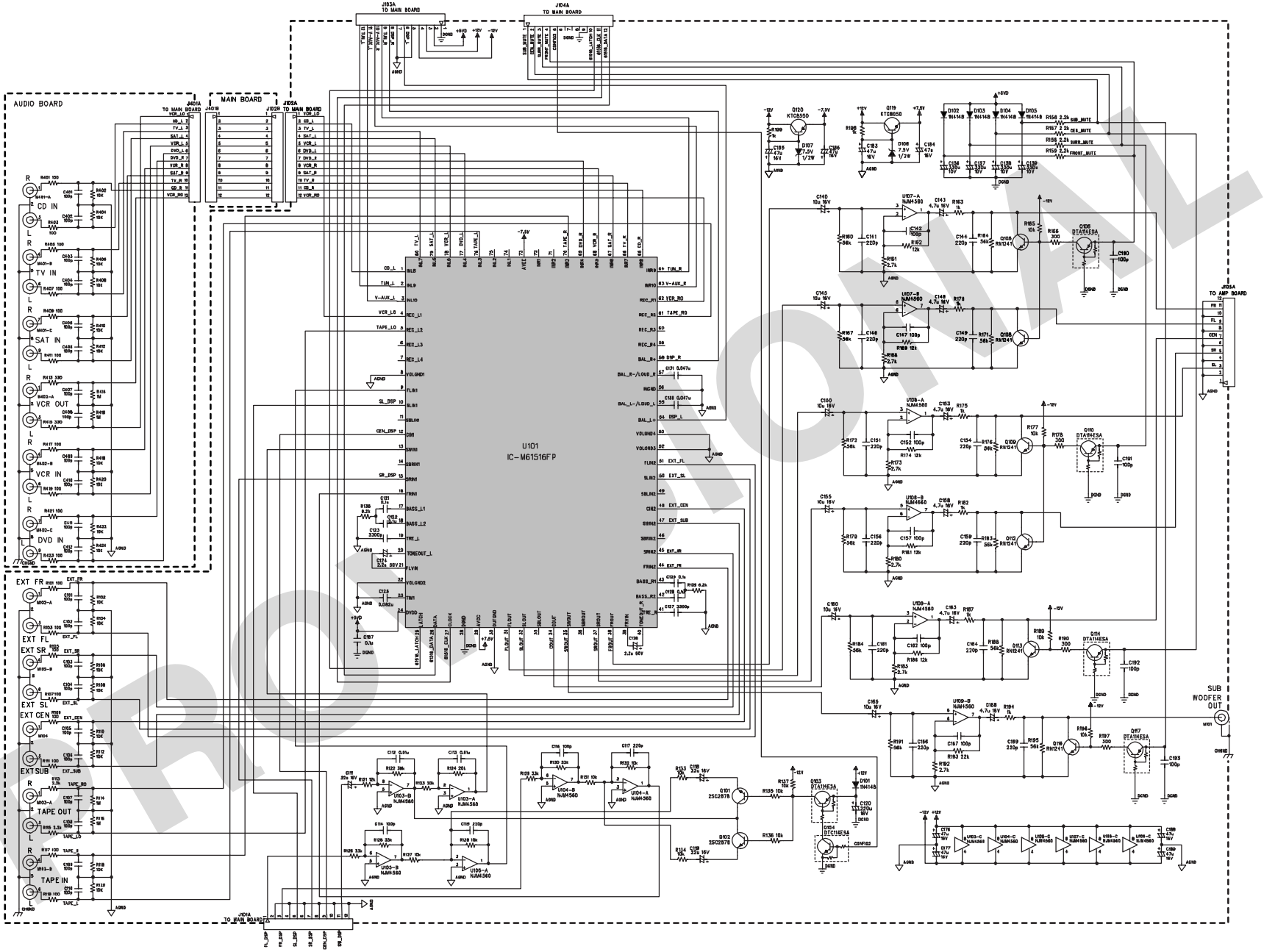


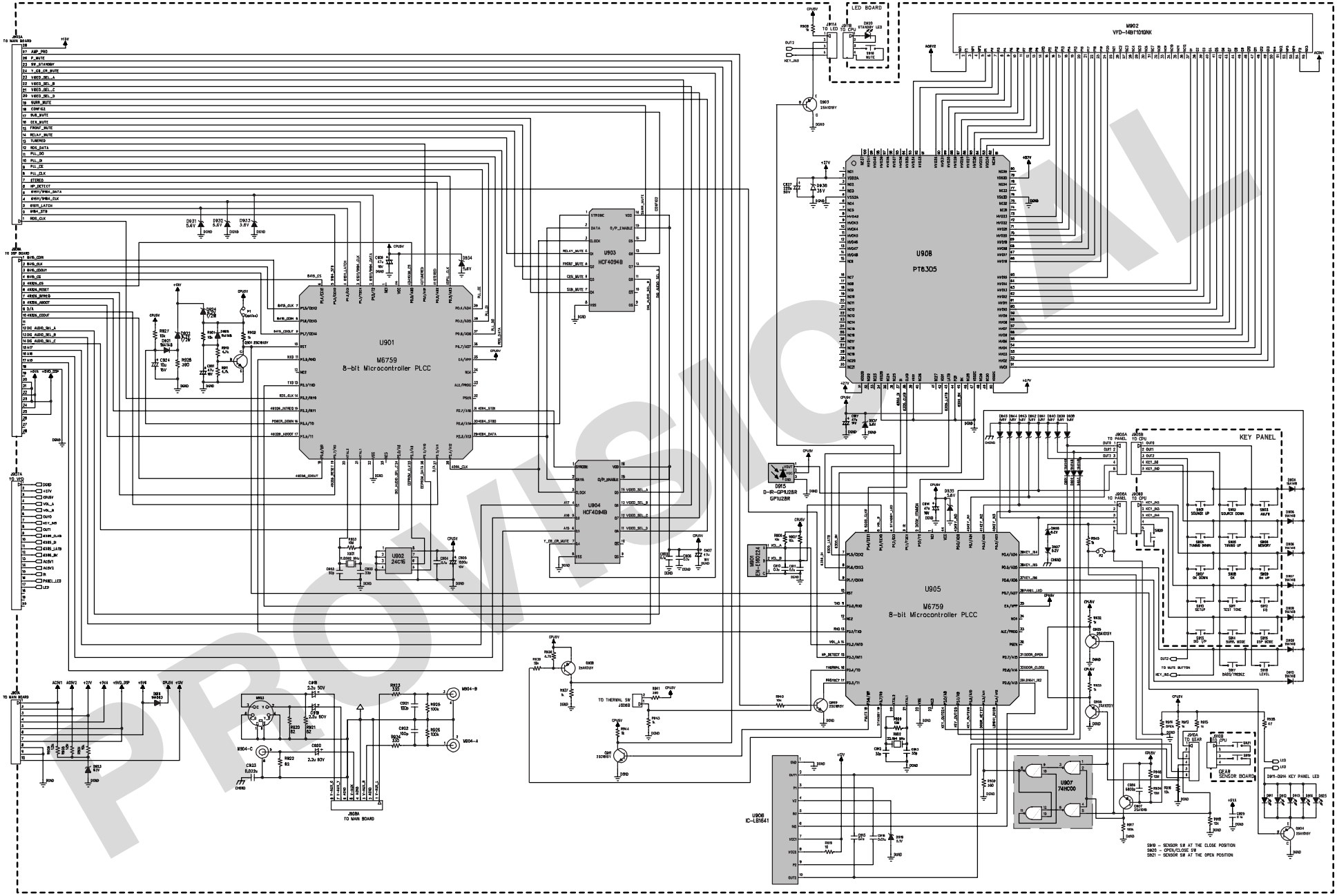
A	B	C	D	E	MON	VCR OUT
L	L	X	X	X	VCR	–
H	L	X	X	X	DVD	–
L	H	X	X	X	SAT	–
H	H	X	X	L	V-AUX	–
X	X	H	L	X	–	DVD
X	X	L	H	X	–	SAT
X	X	H	H	L	–	V-AUX

PROVISIONAL

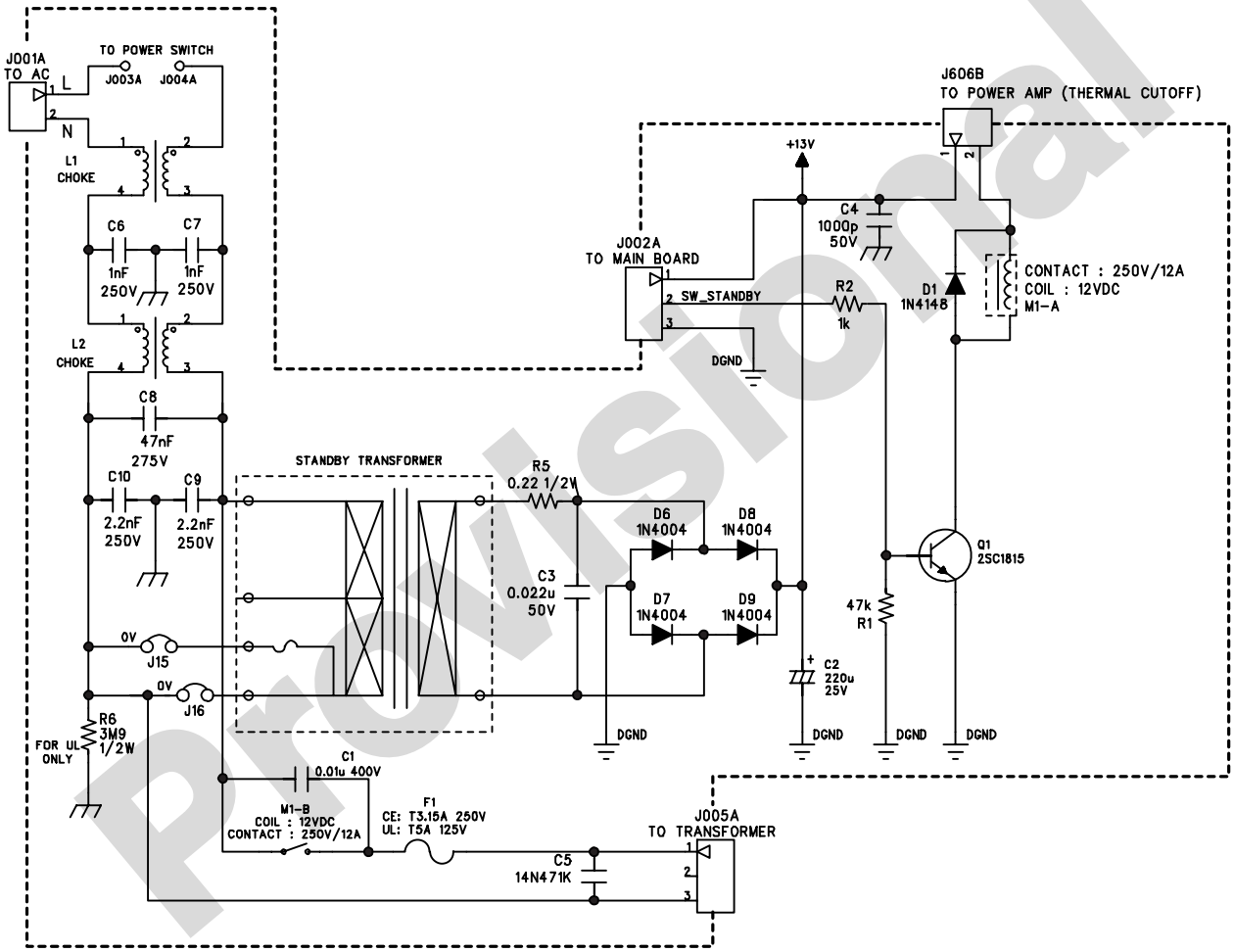


PROVISIONAL

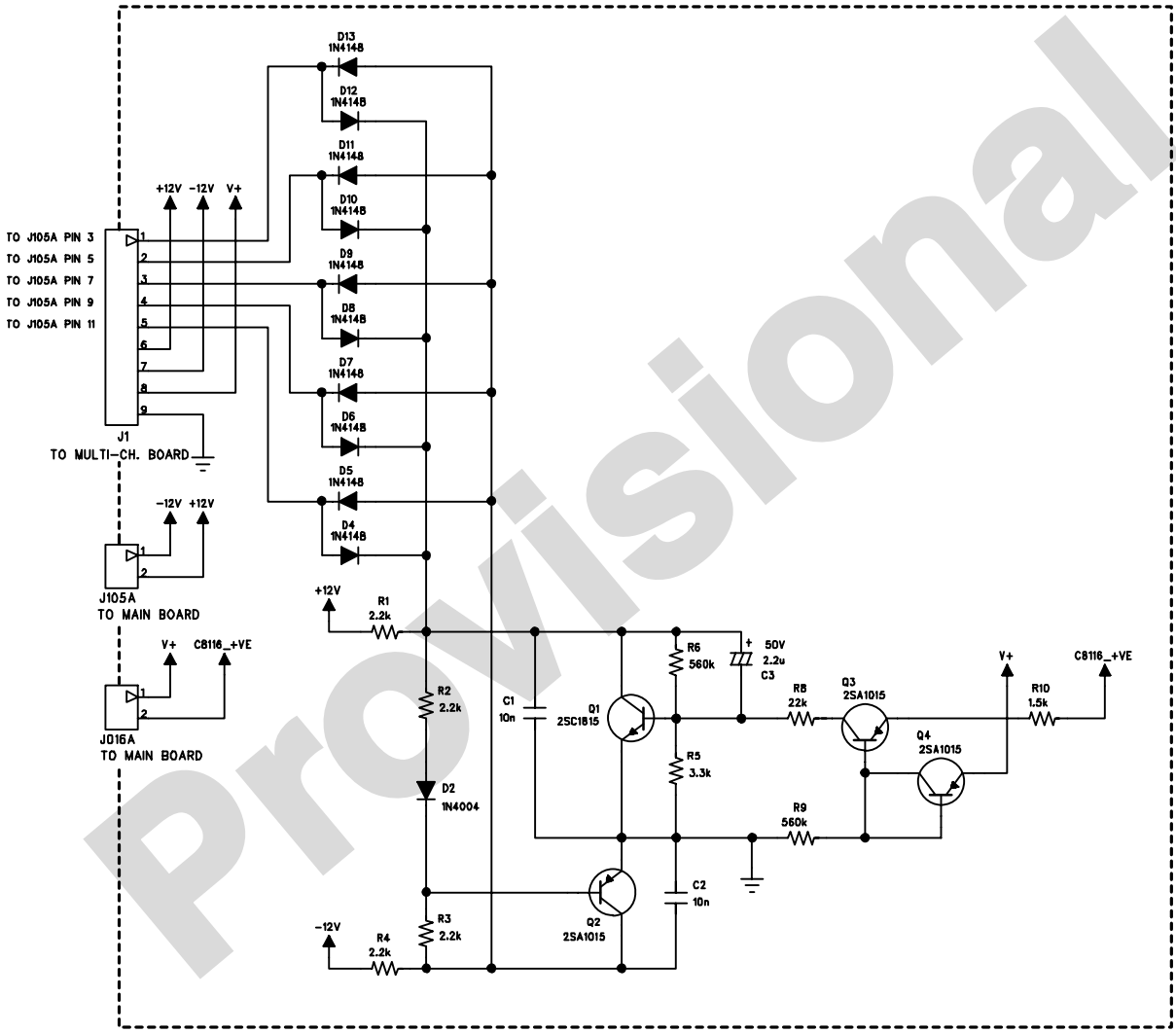

AUDIO BOARD
MAIN BOARD
J103A TO MAIN BOARD
J104A TO MAIN BOARD
J401A TO MAIN BOARD
J402A TO MAIN BOARD
J101A TO MAIN BOARD
J103A TO AMP BOARD
U101 IC-M61516FP
CD IN
TV IN
SAT IN
VCR OUT
VCR IN
DVD IN
EXT FR
EXT FL
EXT SR
EXT SL
EXT CEN
EXTSUB
TAPE OUT
TAPE IN
SUB WOOFER OUT
PROTOTYPE



PROVISIONAL

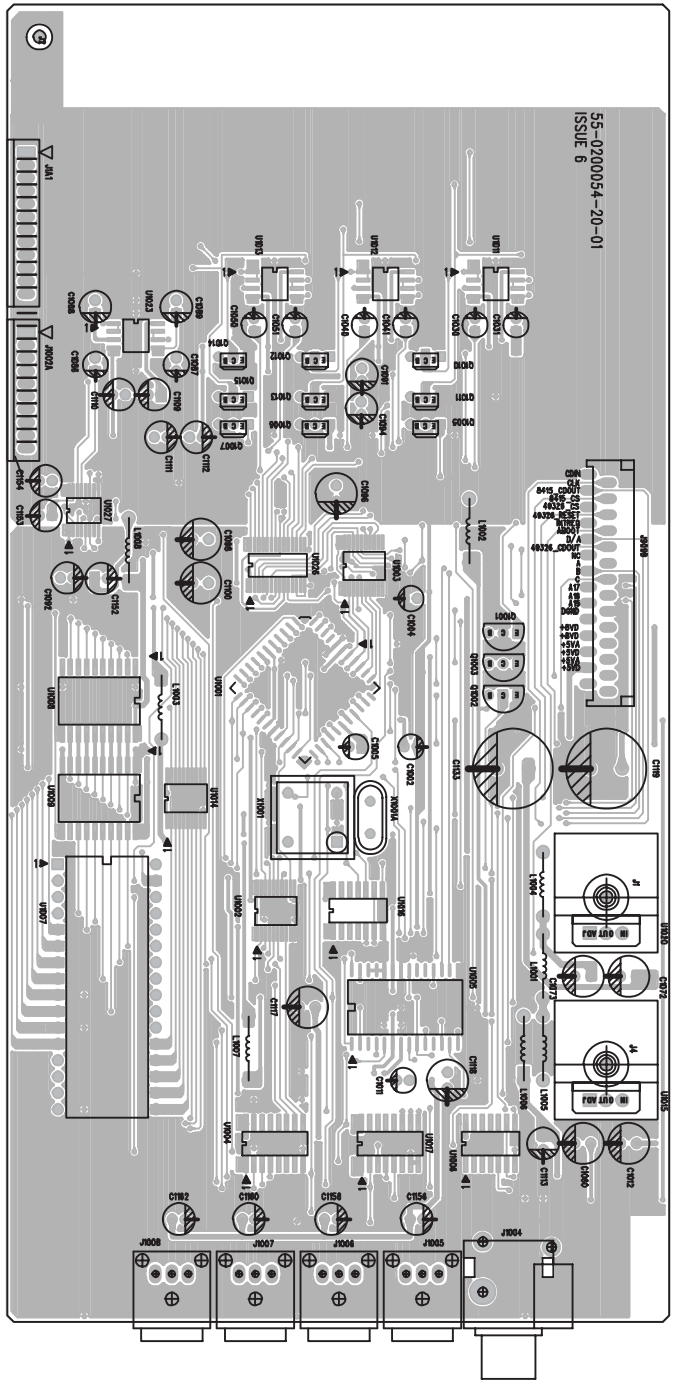


Provisional

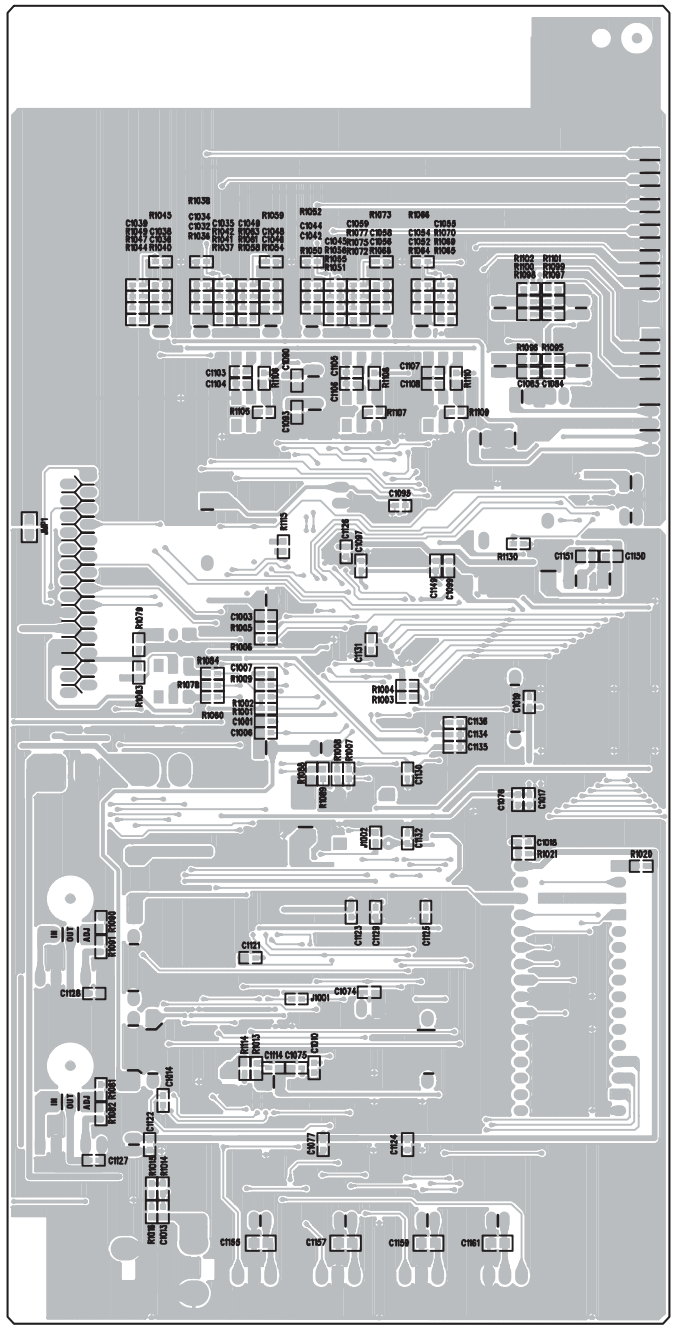


Provisional

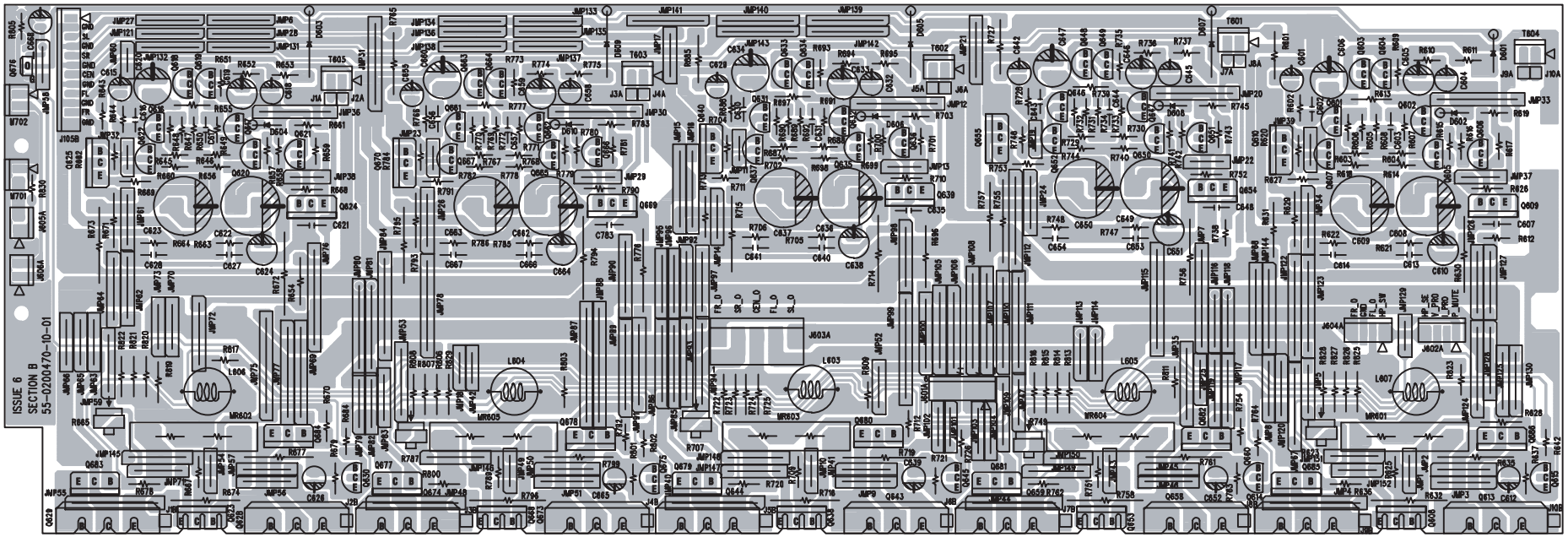
Digital processing P.C.B.
Platine traitement digital
Ltpl. Digitalverarbeitung
Piastra elaborazione digitale
Platina tratamiento digital



Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

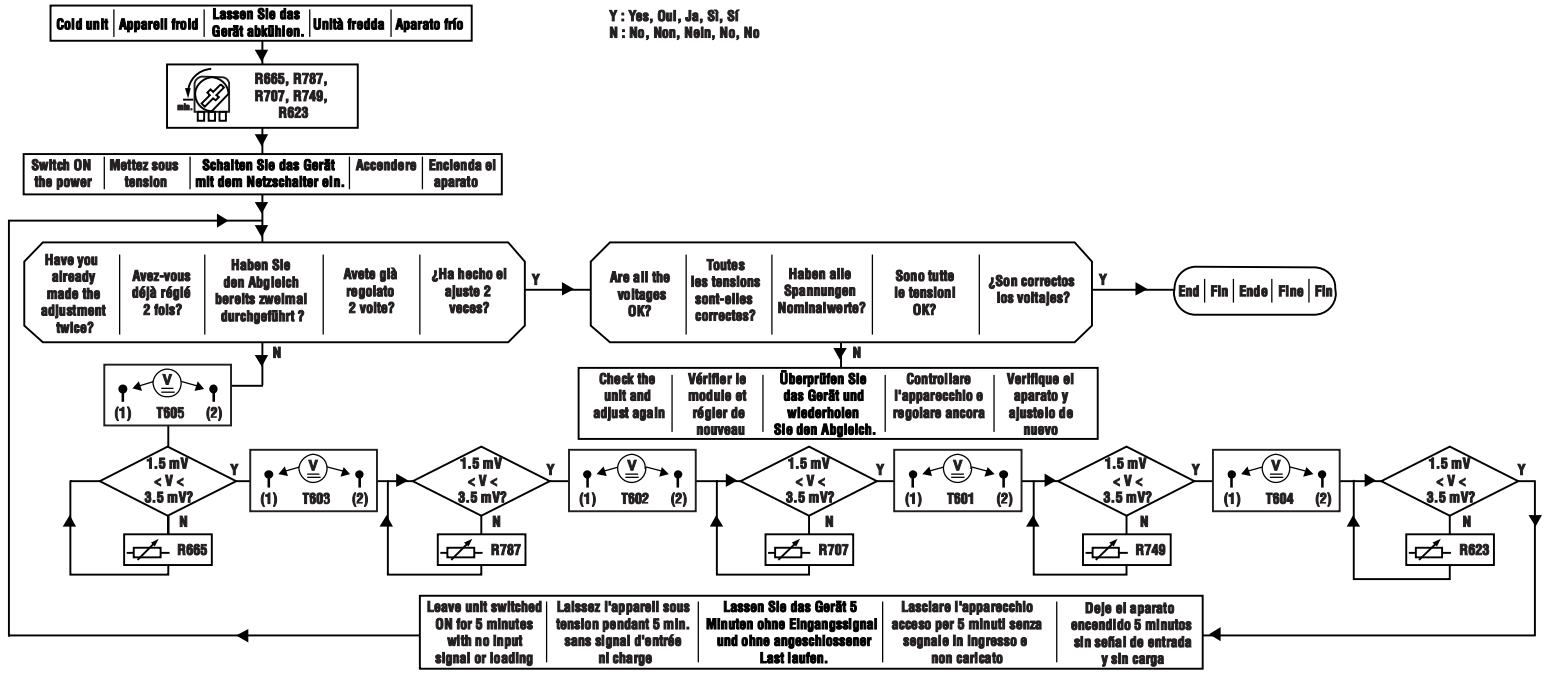


Solder side
Côté cuivre
Lötseite
Lato saldature
Lado del cobre



Amplifier P.C.B.
Platine amplificateur
Ltpl. Endverstärker
Piastra amplificatore
Platina amplificador

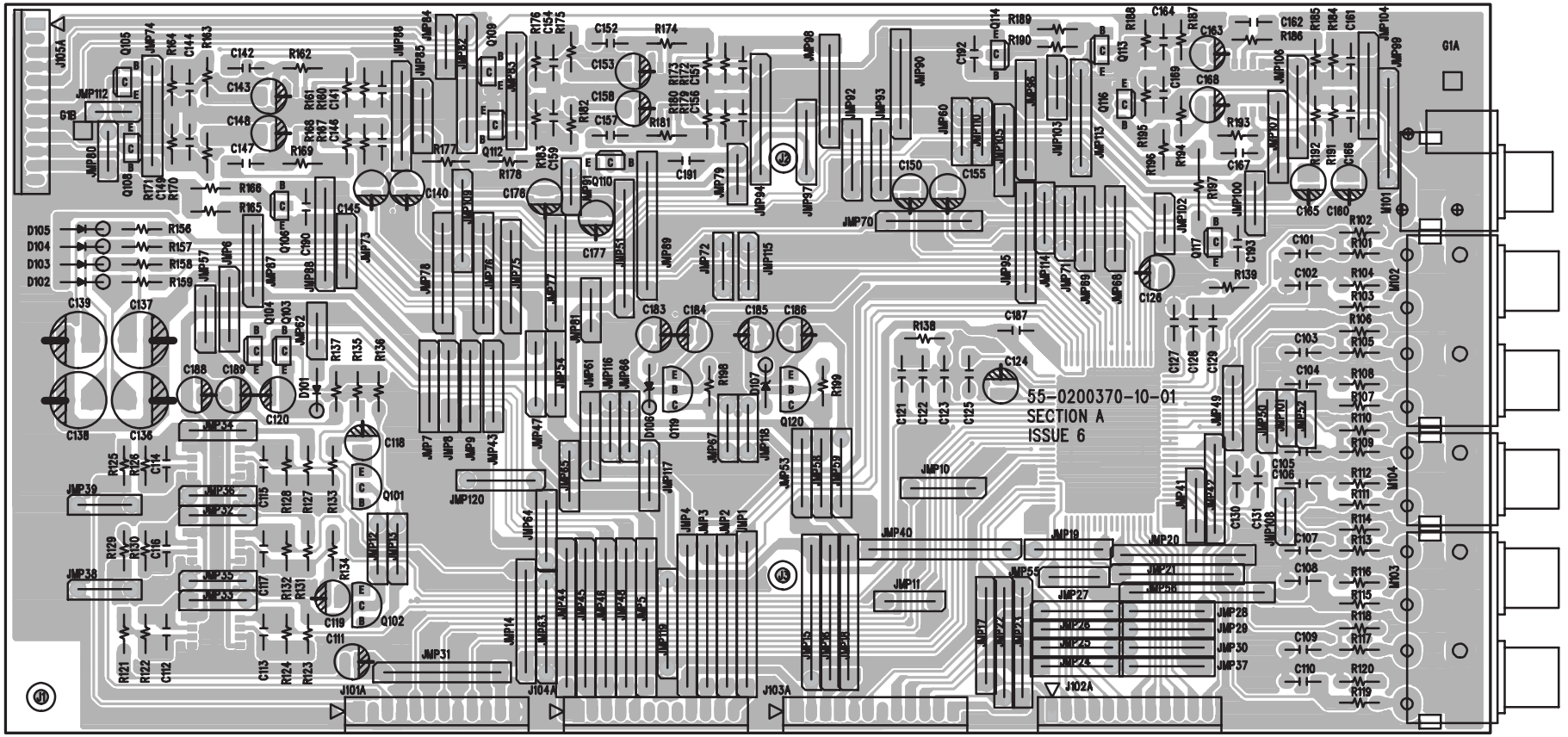
ADJUSTMENT - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES


Cold unit | Appareil froid | Lassen Sie das Gerät abkühlen. | Unità fredda | Aparato frío
Y : Yes, Oui, Ja, Sì, Sí
N : No, Non, Nein, No, No
R665, R787, R707, R749, R623
Switch ON the power | Mettez sous tension | Schalten Sie das Gerät mit dem Netzschalter ein. | Accendere | Encienda el aparato
Have you already made the adjustment twice? | Avez-vous déjà réglé 2 fois? | Haben Sie den Abgleich bereits zweimal durchgeführt ? | Avete già regolato 2 volte? | ¿Ha hecho el ajuste 2 veces?
Are all the voltages OK? | Toutes les tensions sont-elles correctes? | Haben alle Spannungen Nominalwerte? | Sono tutte le tensioni OK? | ¿Son correctos los voltajes?
End | Fin | Ende | Fine | Fin
Check the unit and adjust again | Vérifier le module et régler de nouveau | Überprüfen Sie das Gerät und wiederholen Sie den Abgleich. | Controllare l'apparecchio e regolare ancora | Verifique el aparato y ajustelo de nuevo
(1) T605 (2)
1.5 mV < V < 3.5 mV?
(1) T603 (2)
(1) T602 (2)
(1) T601 (2)
(1) T604 (2)
R665
R787
R707
R749
R623
Leave unit switched ON for 5 minutes with no input signal or loading | Laissez l'appareil sous tension pendant 5 min. sans signal d'entrée ni charge | Lassen Sie das Gerät 5 Minuten ohne Eingangssignal und ohne angeschlossener Last laufen. | Lasciare l'apparecchio acceso per 5 minuti senza segnale in ingresso e non caricato | Deje el aparato encendido 5 minutos sin señal de entrada y sin carga

Audio processing P.C.B.
Platine traitement audio
Ltpl. Audiosignalverarbeitung
Piastra elaborazione audio
Platina del tratamiento audio

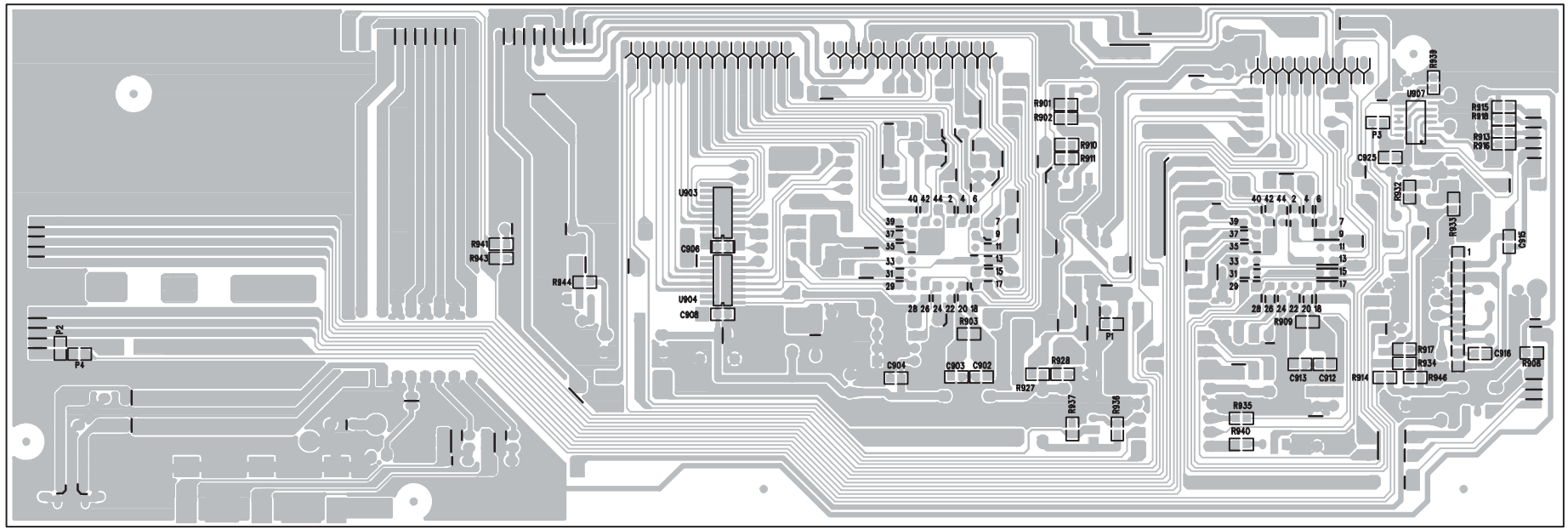
Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

Multi-channel

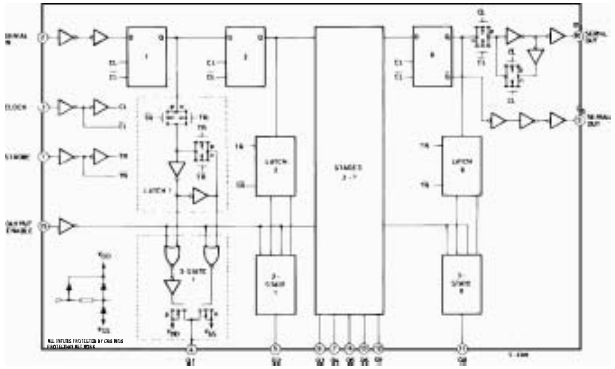


Microcontroller P.C.B.
Platine microcontroleur
Ltpl. Microkontroller
Piastra microprocessore
Platina microcontrolador

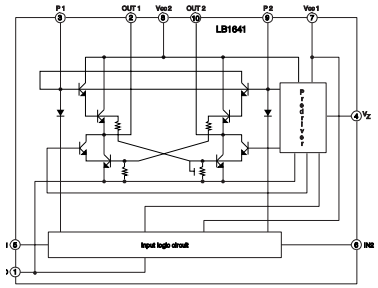
Solder side
Côté cuivre
Lötseite
Lato saldature
Lado del cobre

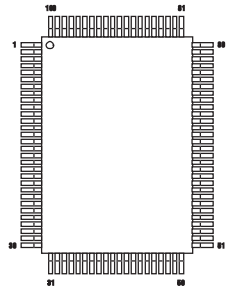


U903,U904 HCF4094B

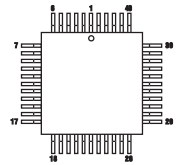


U906 LB1641

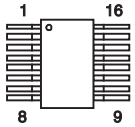




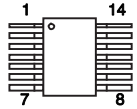
PT6305



M6759-A1



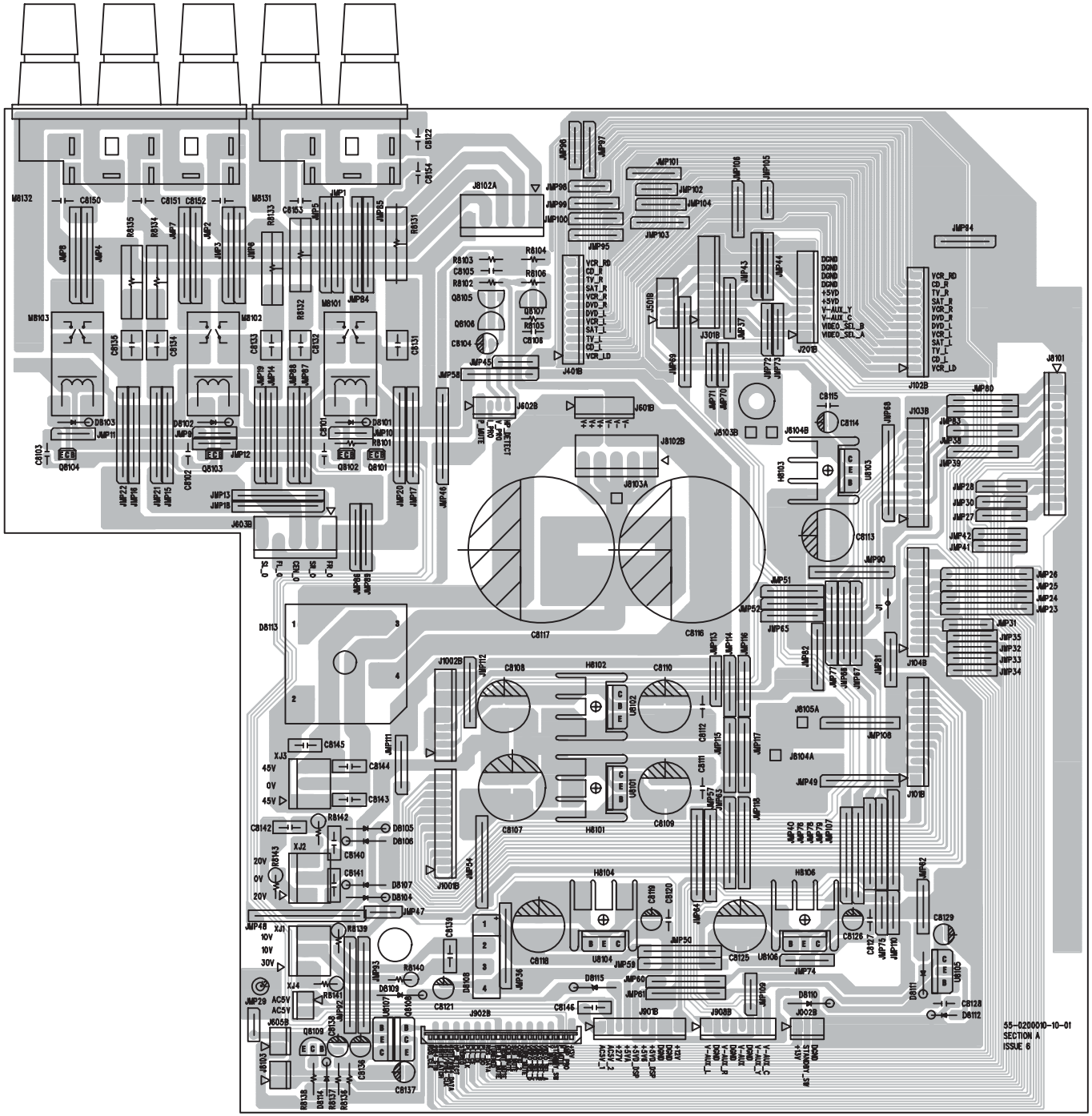
HCF4094B



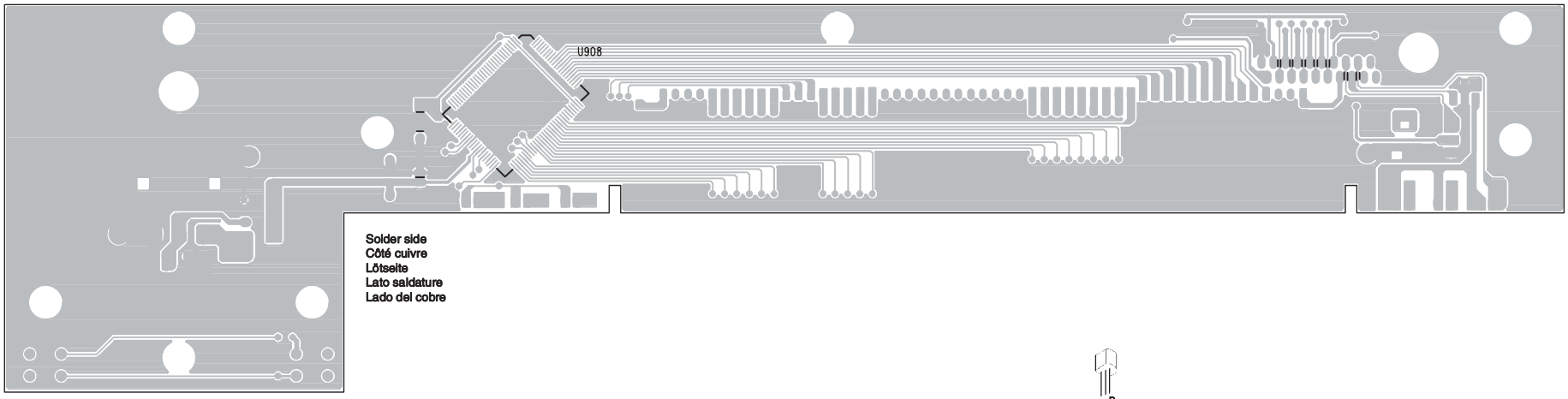
MM74HC00M

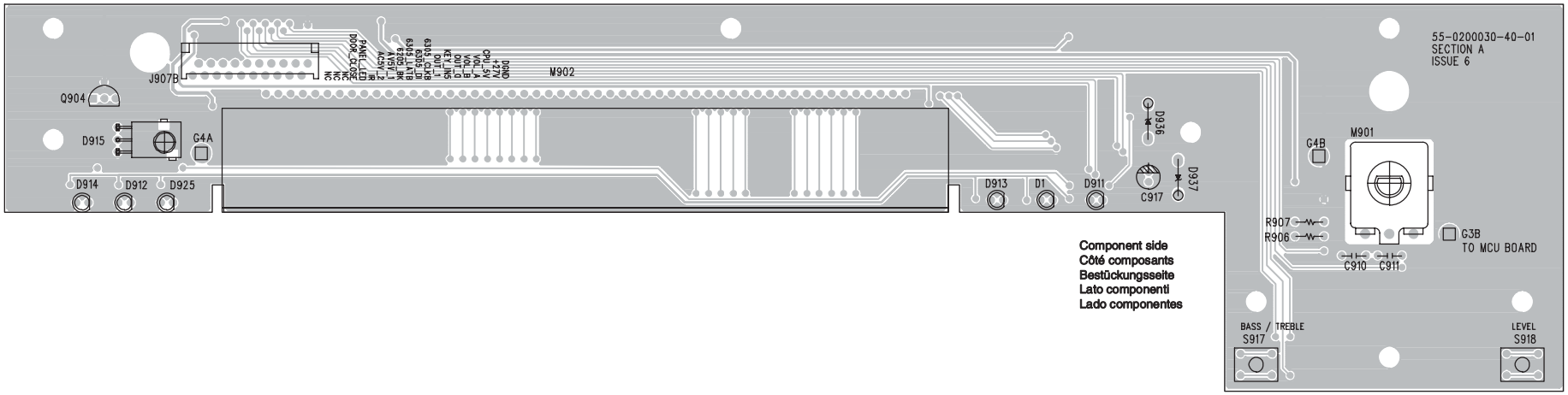
2SA 1015Y
2SC1815Y

Main P.C.B.
Platine principale
Grundplatte
Piastra principale
Platina principal

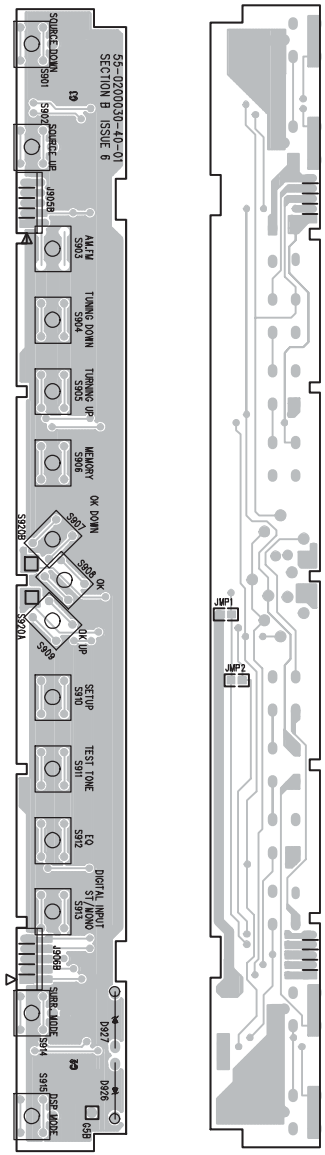


Controls / display P.C.B.
Platine commandes / afficheurs
Ltpl. Bedienteil / Anzeige
Piastra comandi / indicatore
Platina de mandos / indicadores

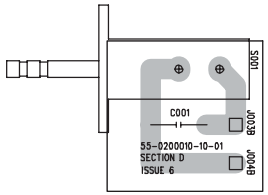




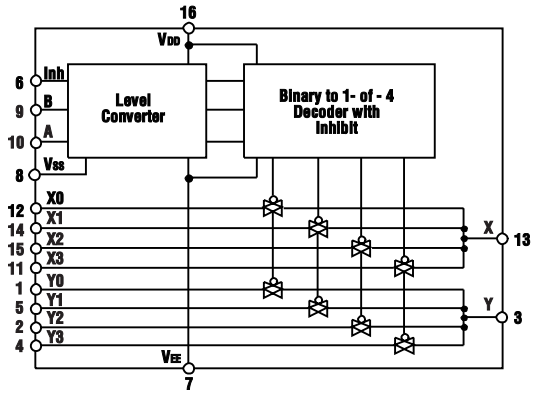
Controls P.C.B.
Platine commandes
Ltpl. Bedienteil
Piastra comandi
Platina de mandos



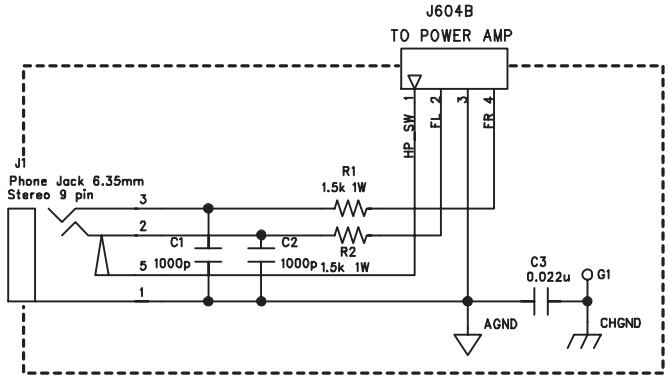
Switch ON / OFF P.C.B.
Platine Inter M / A
Ltpl. EIN / AUS - Schalter
Piastra interruttore
Platina interruptor



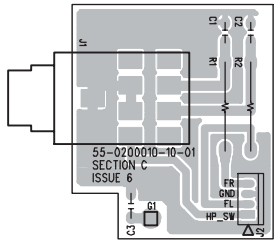
U501, U502 74HC4052

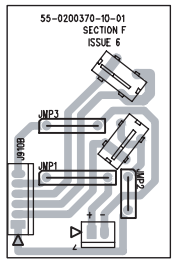


HEADPHONE JACK SCHEMATIC DIAGRAM - SCHEMA DE LA PRISE CASQUE - SCHALTBILD KOPFHÖRERBUSCHSE - SCHEMA PRESA PER CUFFIA - ESQUEMA TOMA AURICULARES



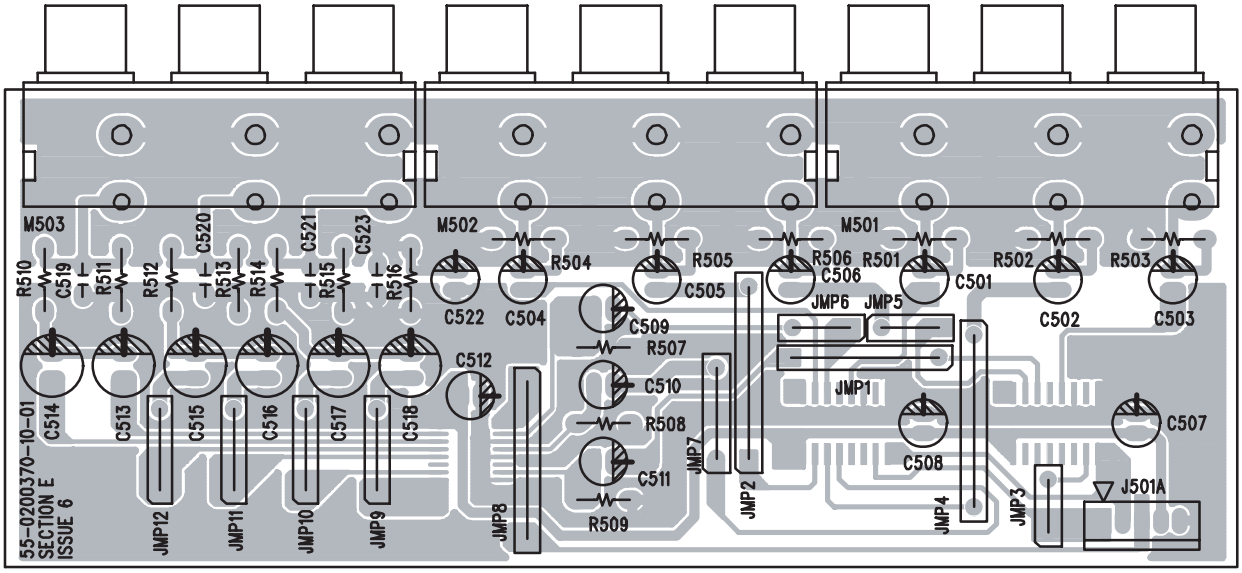
Headphone-jack P.C.B.
Platine prise-casque
Ltpl. Kopfhörerbuchse
Piastra presa per cuffia
Platina toma auriculares





Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

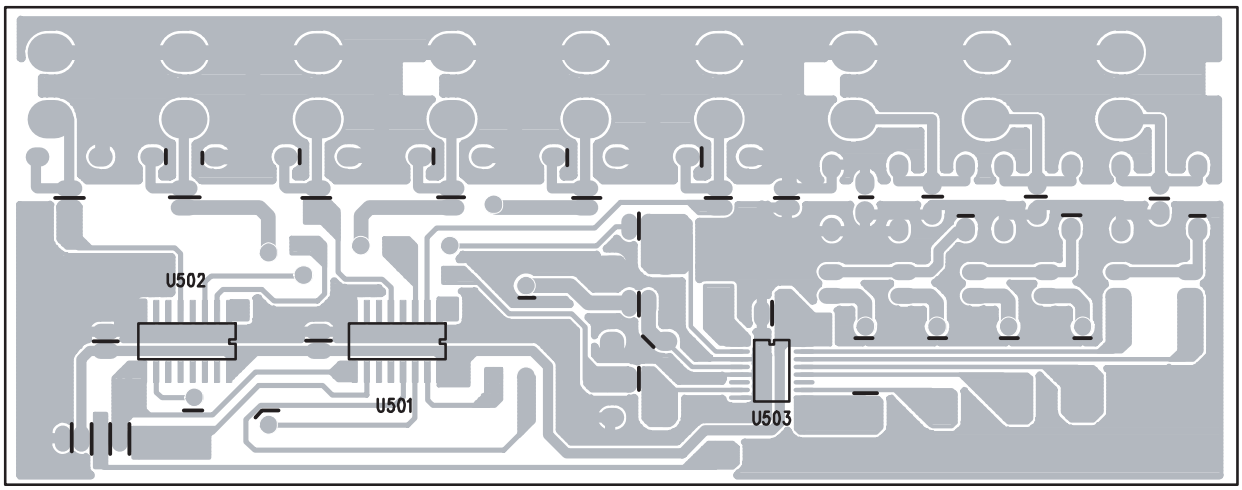
component video

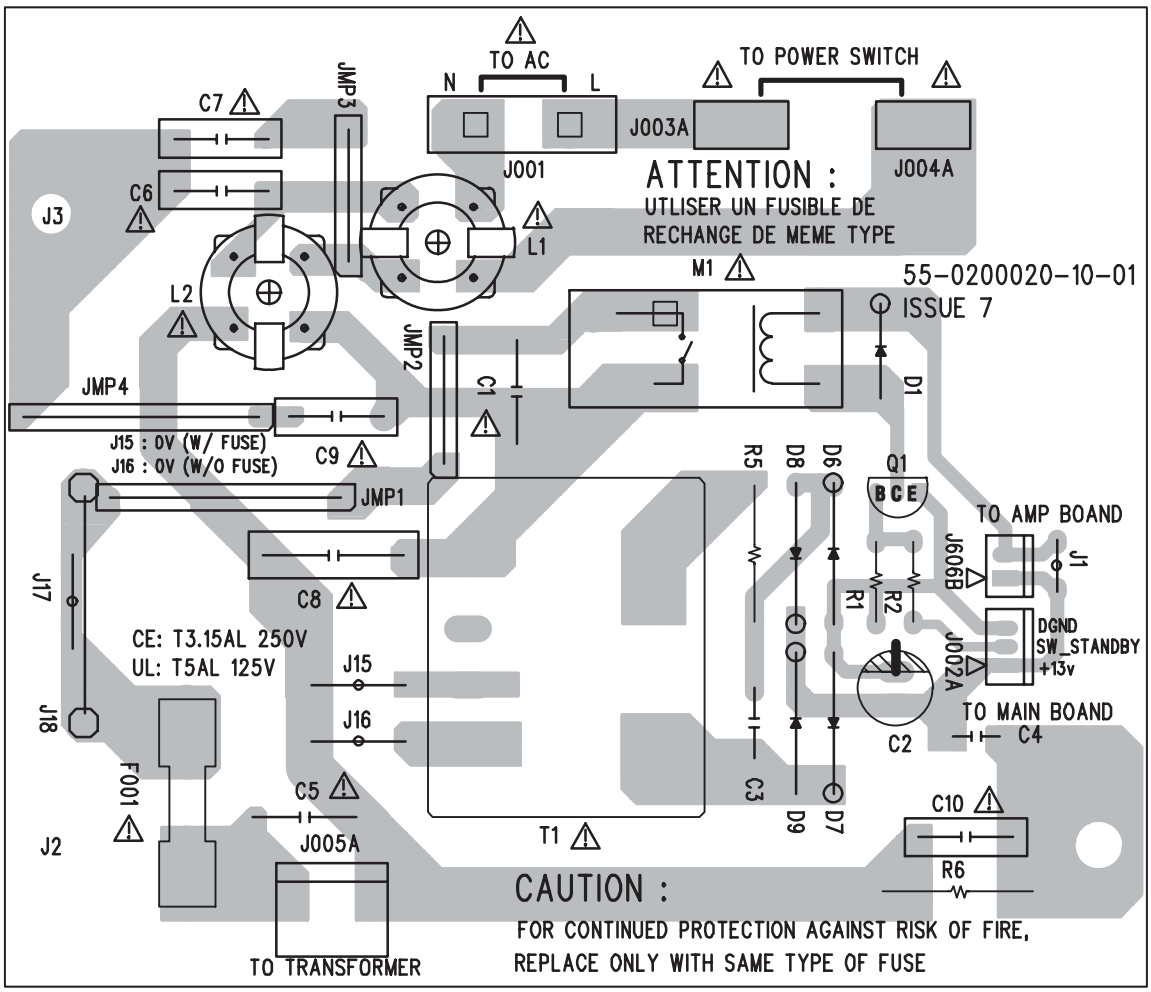


Video processing P.C.B.
Platine traitement vidéo
Ltpl. Videosignalverarbeitung
Piastra elaborazione video
Platina del tratamiento vídeo

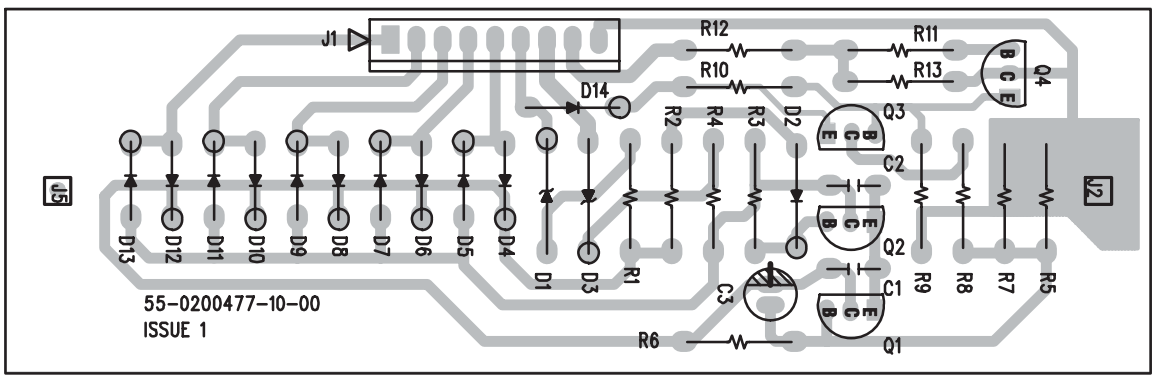
Solder side
Côté cuivre
Lötseite
Lato saldature
Lado del cobre

component video





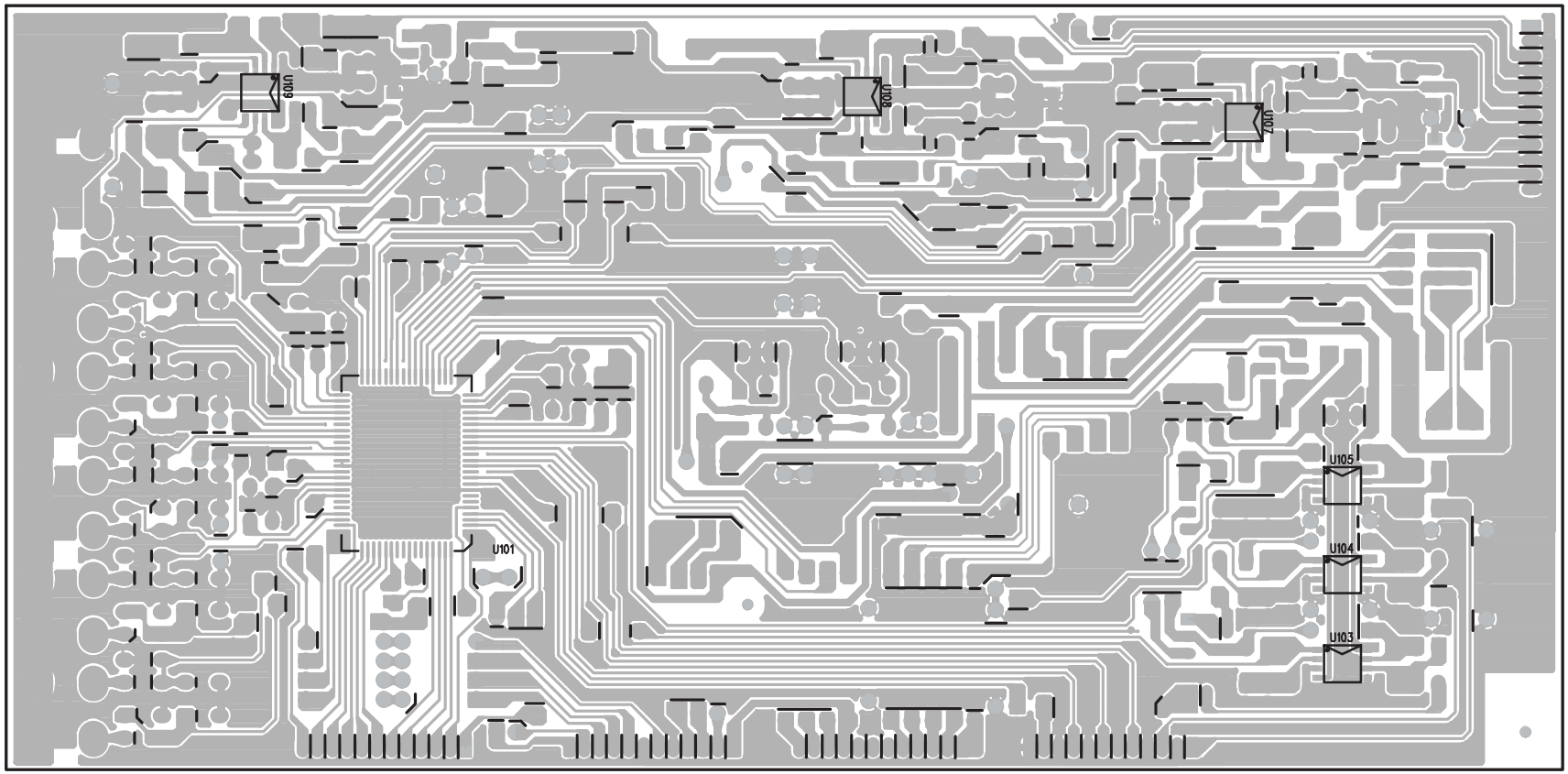
Power supply P.C.B.
Platines alimentation
Ltpl. Netzteil
Piastre alimentazione
Platinas alimentación

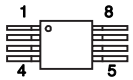


Audio processing P.C.B.
Platine traitement audio
Ltpl. Audiosignalverarbeitung
Piastra elaborazione audio
Platina del tratamiento audio

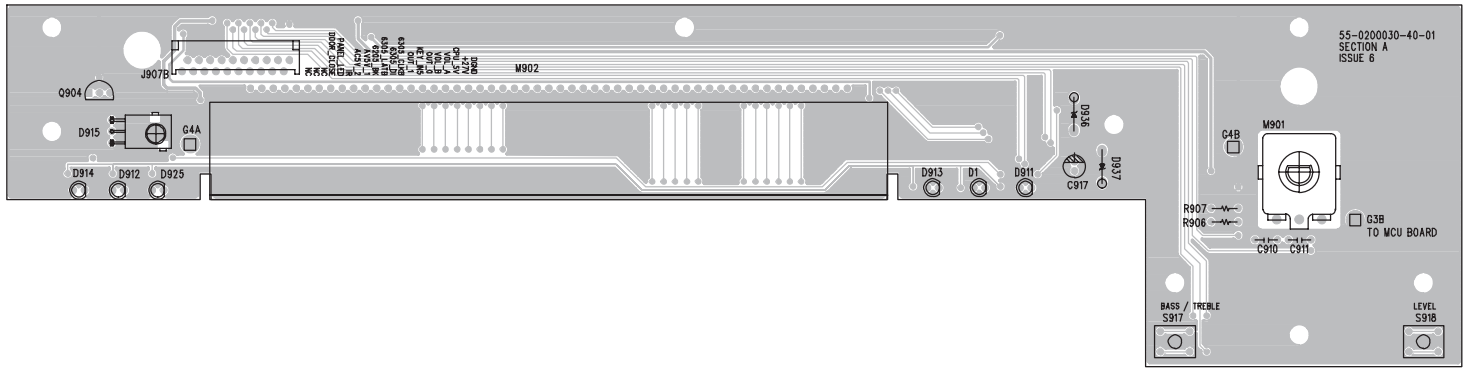
Solder side
Côté cuivre
Lötseite
Lato saldature
Lado del cobre

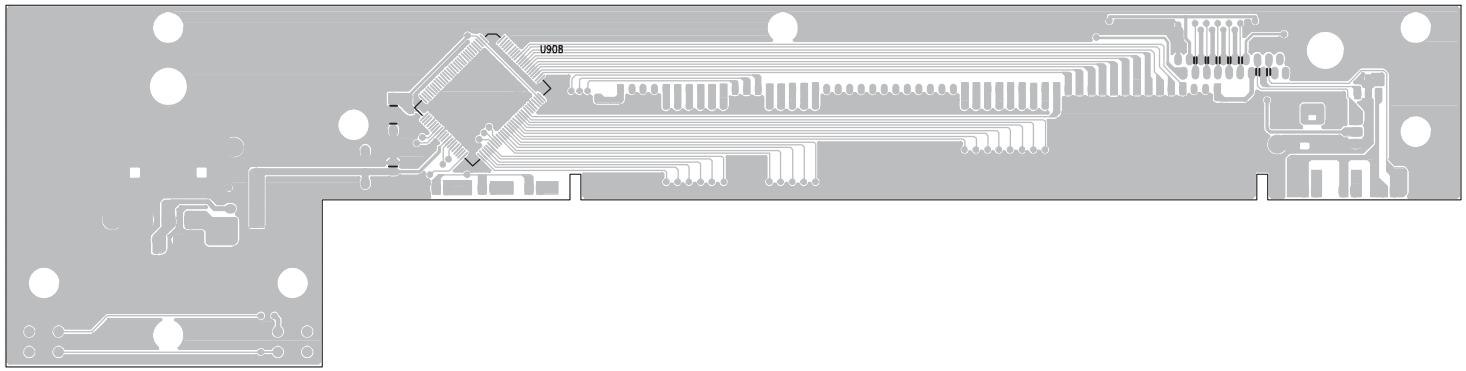
Multi-channel

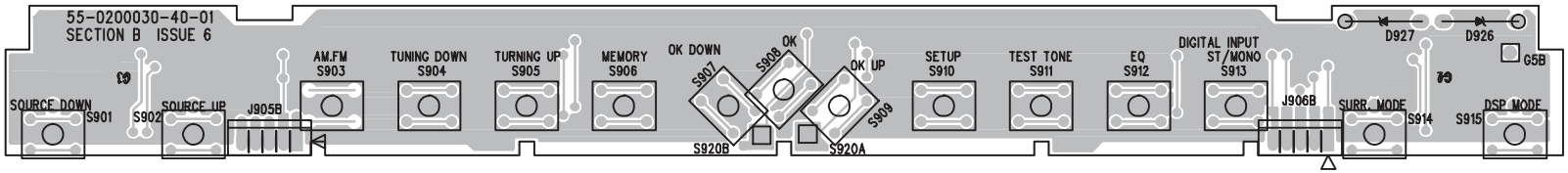


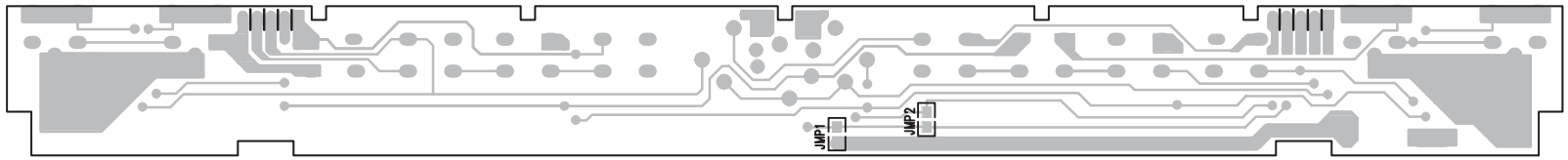


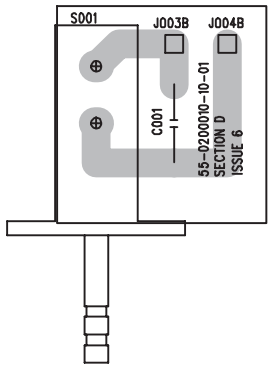
NJM4560

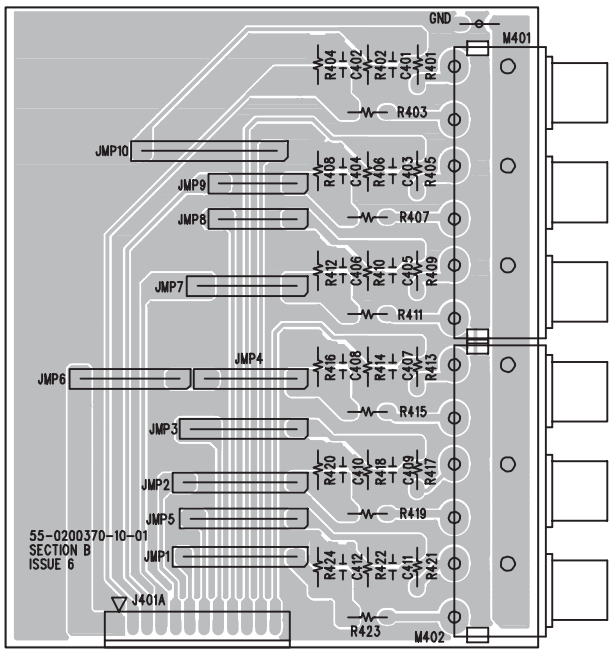

55-0200030-40-01
SECTION A
ISSUE 6
J907B
M902
Q904
D915
C4A
D914
D912
D925
D913
D1
D911
D936
C917
D937
C4B
M901
R907
R906
C910
C911
G3B
TO MCU BOARD
BASS / TREBLE
S917
LEVEL
S918

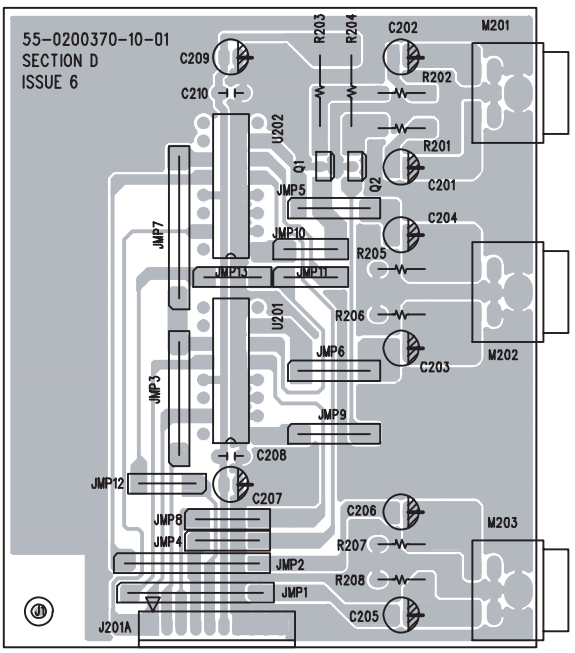

U908


55-0200030-40-01
SECTION B ISSUE 6
SOURCE DOWN
S901
S902
SOURCE UP
J905B
AM.FM
S903
TUNING DOWN
S904
TURNING UP
S905
MEMORY
S906
OK DOWN
S907
S908
OK
OK UP
S909
S920B
S920A
SETUP
S910
TEST TONE
S911
EQ
S912
DIGITAL INPUT
ST/MONO
S913
J906B
SURR. MODE
S914
DSP MODE
S915
D927
D926
G5B


JMP1
JMP2


S001
J003B
J004B
C001
55-0200010-10-01
SECTION D
ISSUE 6


GND
M401
R404
C402
R402
C401
R401
R403
JMP10
R406
C404
R406
C403
R405
JMP9
JMP8
R407
R412
C406
R410
C405
R409
JMP7
R411
JMP4
R416
C408
R414
C407
R413
JMP6
R415
JMP3
R420
C410
R418
C409
R417
JMP2
R419
JMP5
55-0200370-10-01
SECTION B
ISSUE 6
R424
C412
R422
C411
R421
JMP1
J401A
R423
M402


55-0200370-10-01
SECTION D
ISSUE 6
C209
C210
R203
R204
C202
M201
R202
U202
R201
Q1
Q2
C201
JMP5
C204
JMP7
JMP10
R205
JMP13
JMP11
U201
R206
JMP6
C203
M202
JMP3
JMP9
C208
JMP12
C207
C206
M203
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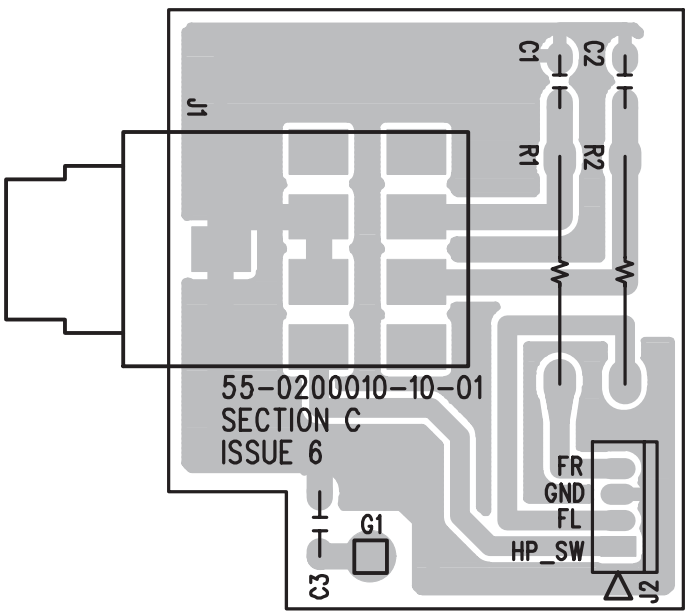
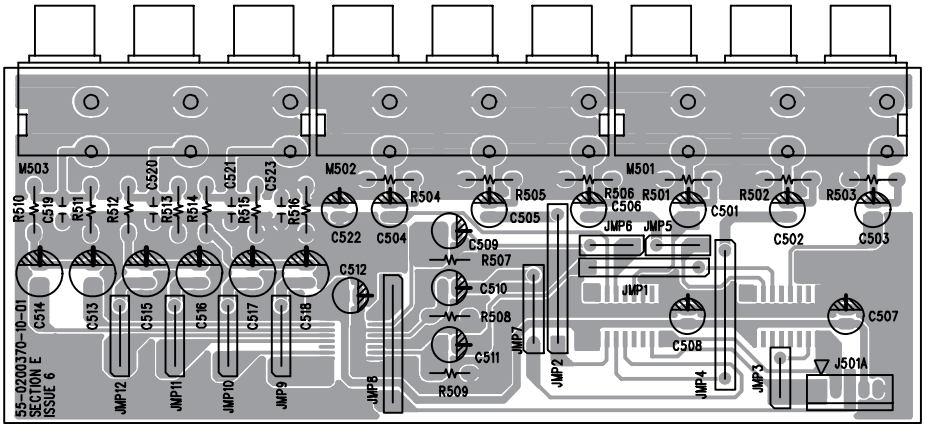
R207
JMP4
JMP2
R208
JMP1
C205
J201A


C1
C2
J1
R1
R2
55-0200010-10-01
SECTION C
ISSUE 6
FR
GND
FL
HP_SW
G1
C3
J2


M503
R510
C519
R511
R512
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C521
R515
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R516
M502
C522
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R505
C505
C509
R507
C510
R508
C511
R509
C512
M501
R506
C506
R501
C501
JMP6
JMP5
JMP1
C508
R502
C502
R503
C503
C507
J501A
C514
C513
C515
C516
C517
C518
JMP12
JMP11
JMP10
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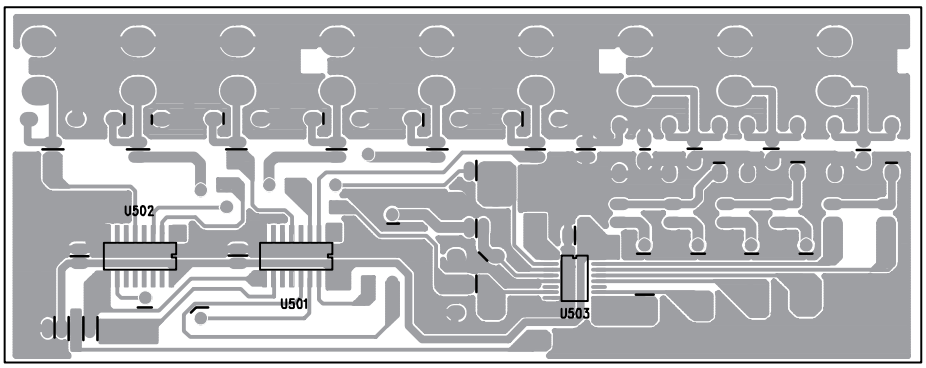
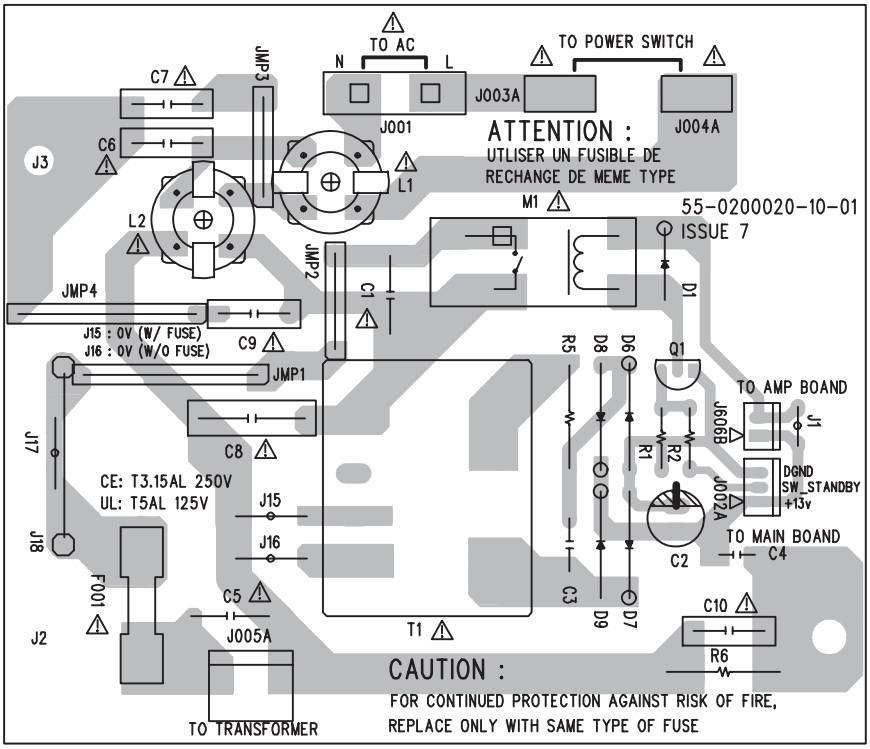
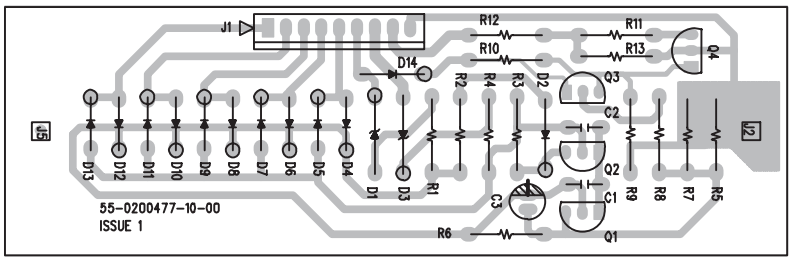
JMP7
JMP2
JMP4
JMP3
55-0200370-10-01
SECTION E
ISSUE 6


U502
U501
U503


TO AC
N
L
TO POWER SWITCH
J003A
J004A
J001
ATTENTION :
UTLISER UN FUSIBLE DE
RECHANGE DE MEME TYPE
55-0200020-10-01
ISSUE 7
C7
JMP3
C6
J3
L1
L2
M1
D1
JMP2
C1
JMP4
J15 : 0V (W/ FUSE)
J16 : 0V (W/O FUSE)
C9
JMP1
R5
D8
D6
Q1
TO AMP BOAND
J606B
J1
J17
C8
R1
R2
DGND
SW_STANDBY
+13v
J002A
CE: T3.15AL 250V
UL: T5AL 125V
J15
J16
TO MAIN BOAND
C4
C2
J18
F001
C5
C3
D9
D7
C10
J2
J005A
T1
R6
CAUTION :
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE OF FUSE
TO TRANSFORMER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D12
D11
D10
D9
D8
D7
D6
D5
D4
D1
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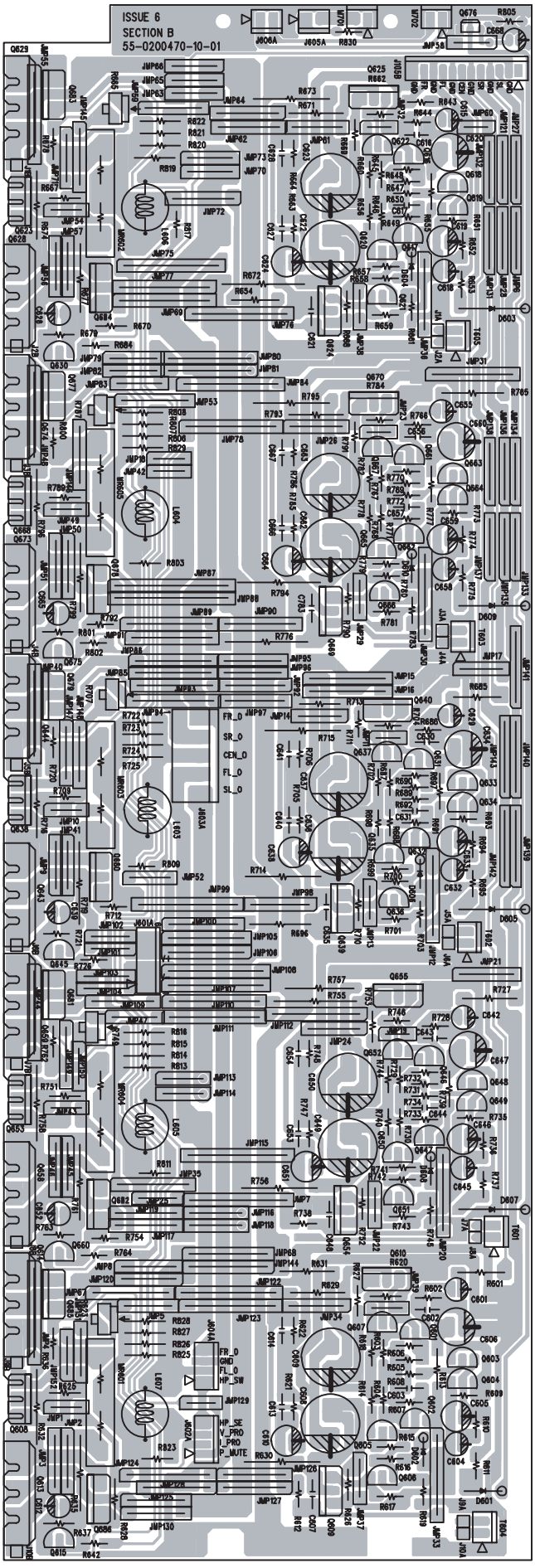
ISSUE 1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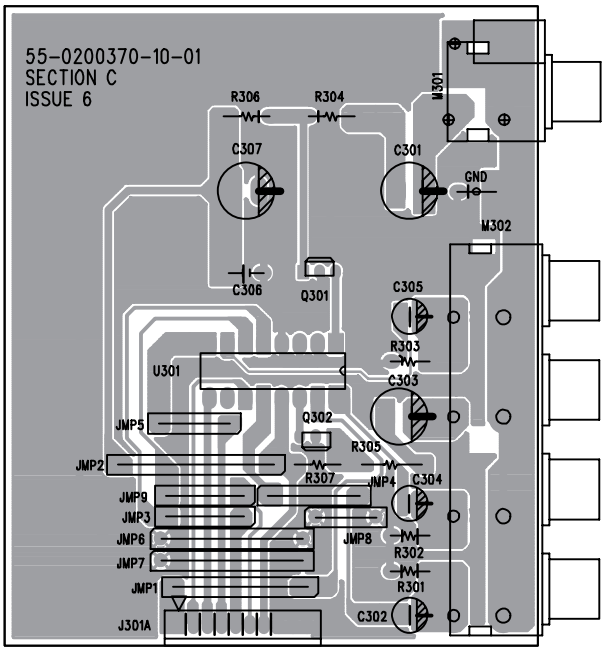
55-0200370-10-01
SECTION C
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C301
GND
M302
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U301
C303
JMP5
Q302
R305
JMP2
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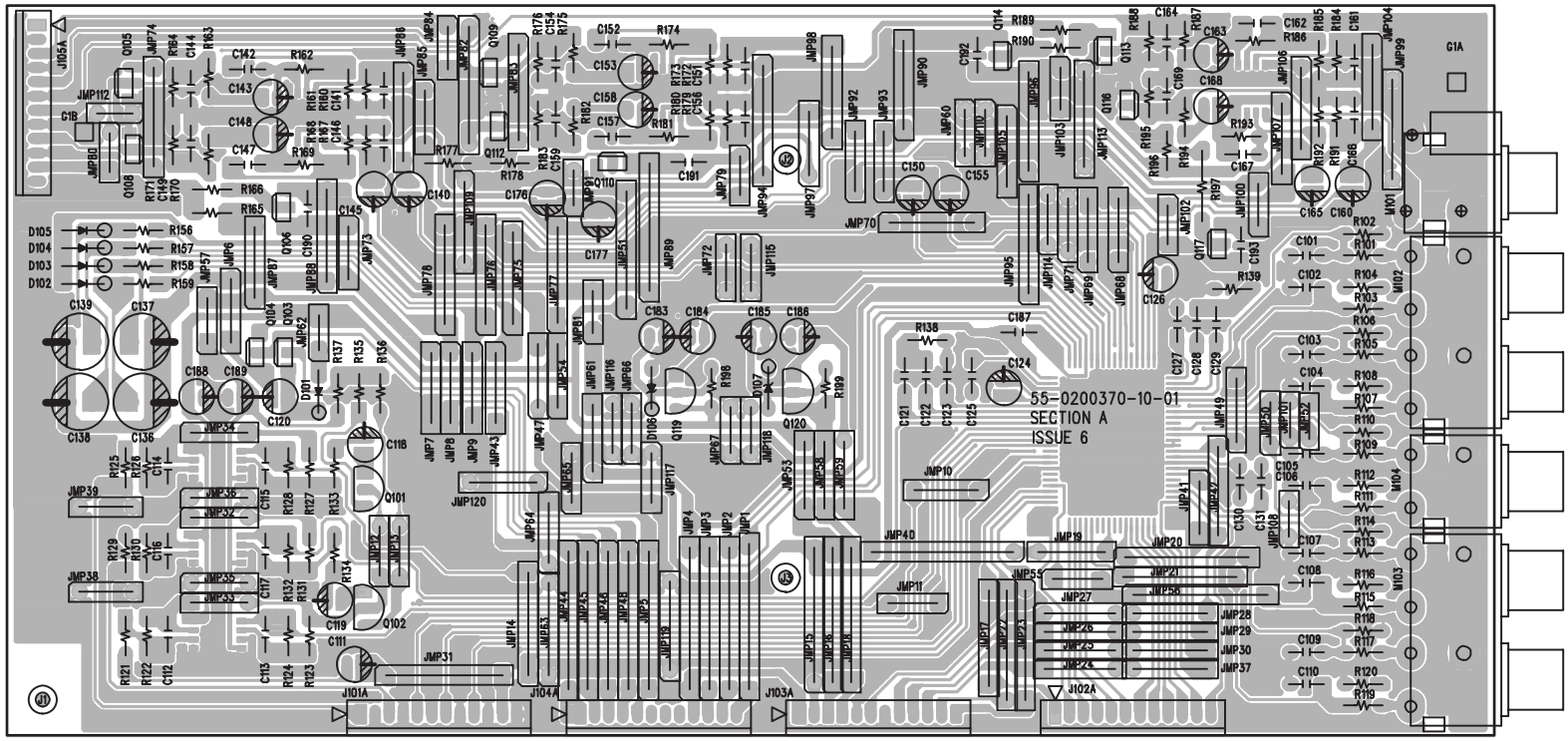
J301A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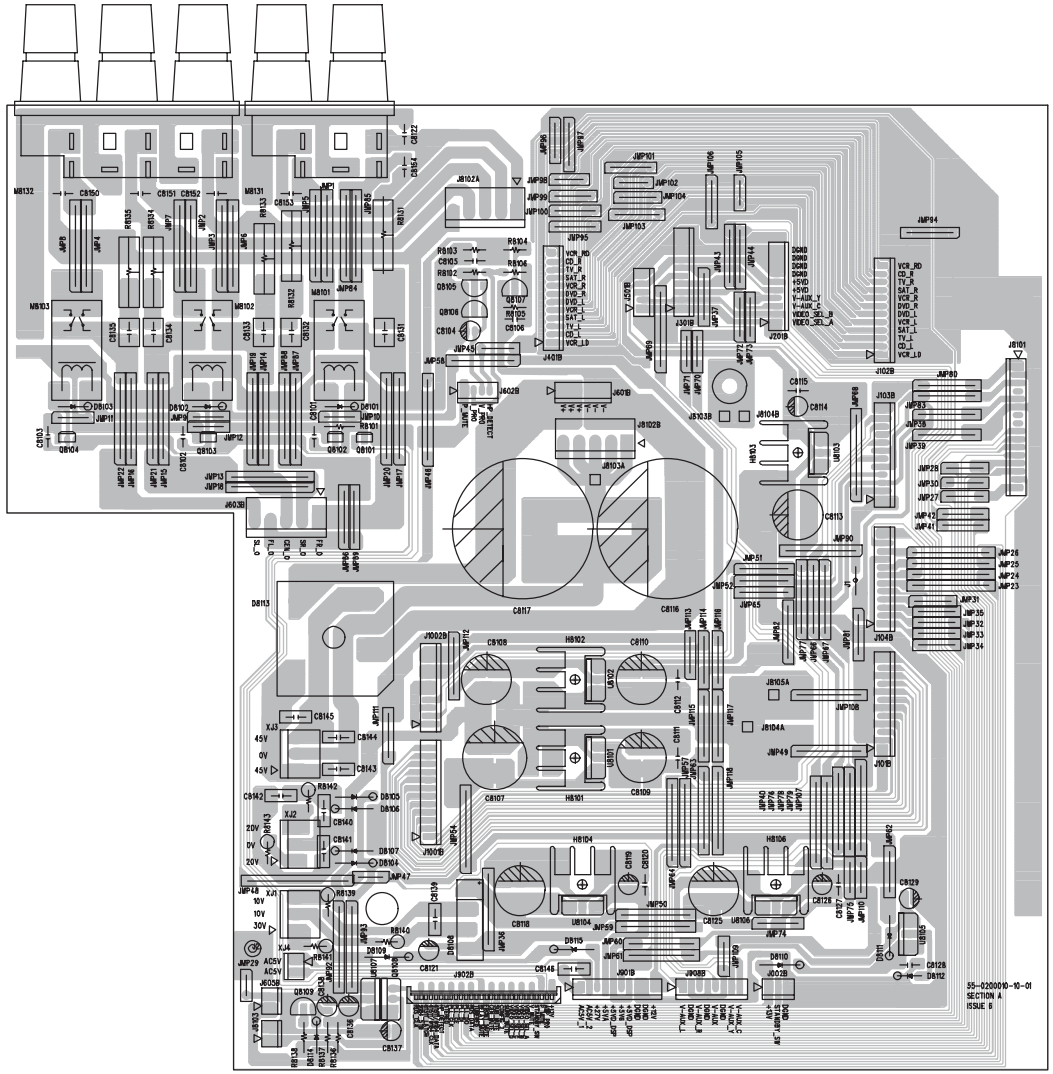
ISSUE 6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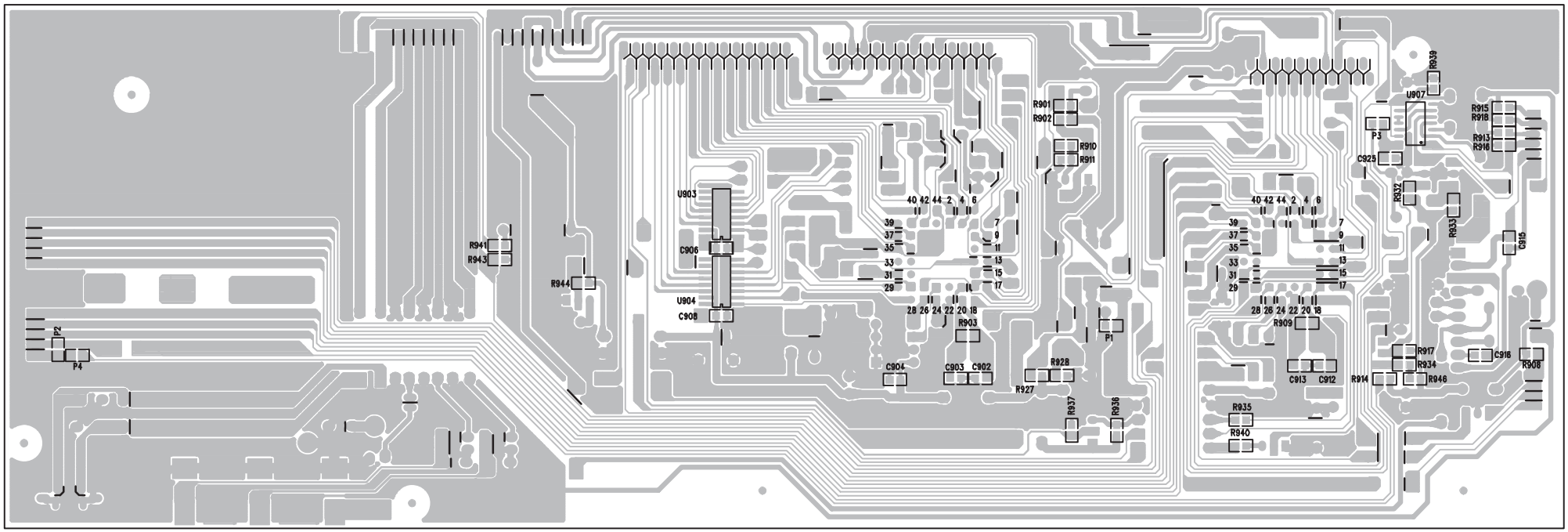
SECTION A
ISSUE 6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C908
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17
28 26 24 22 20 18
R903
C904
C903
C902
R901
R902
R910
R911
P1
R928
R927
R937
R936
R939
U907
P3
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R915
R918
R913
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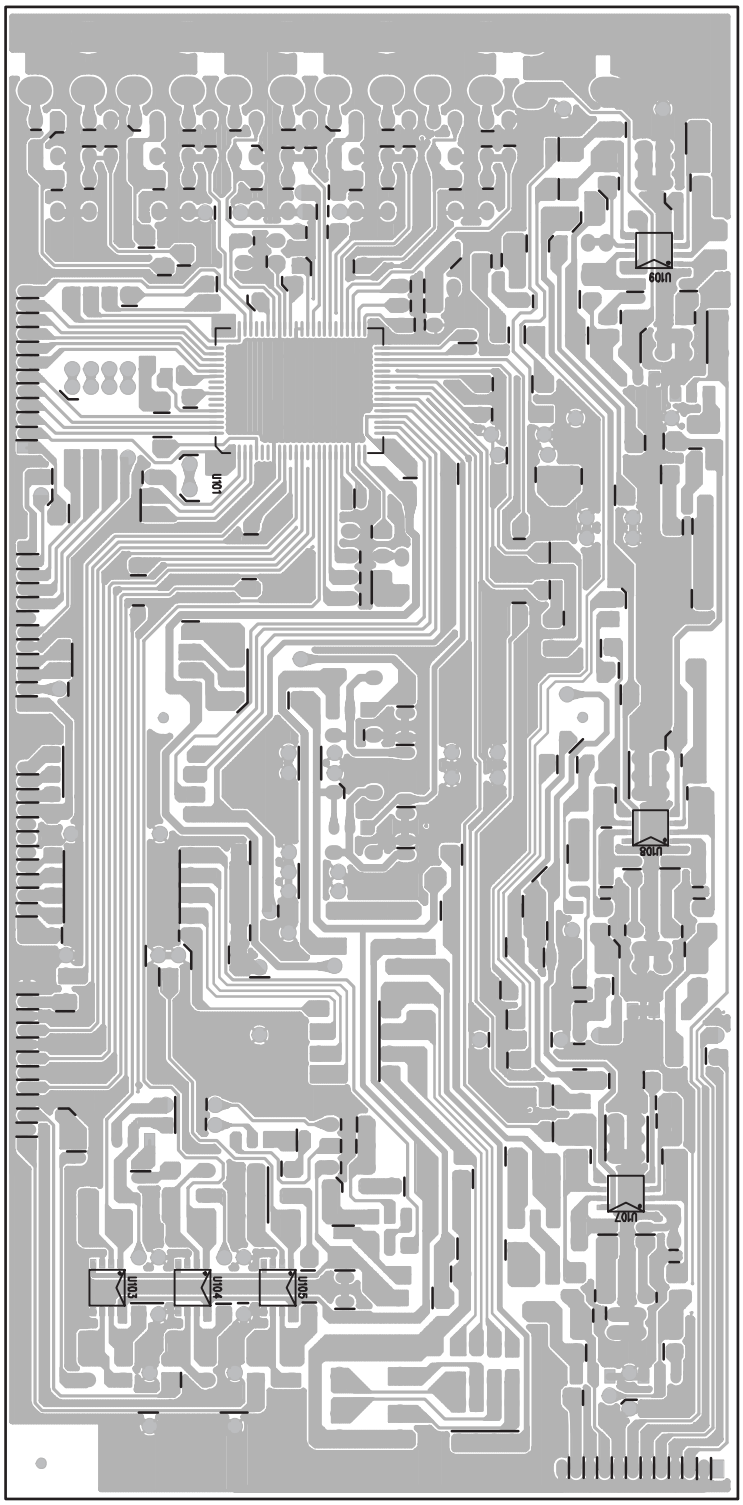
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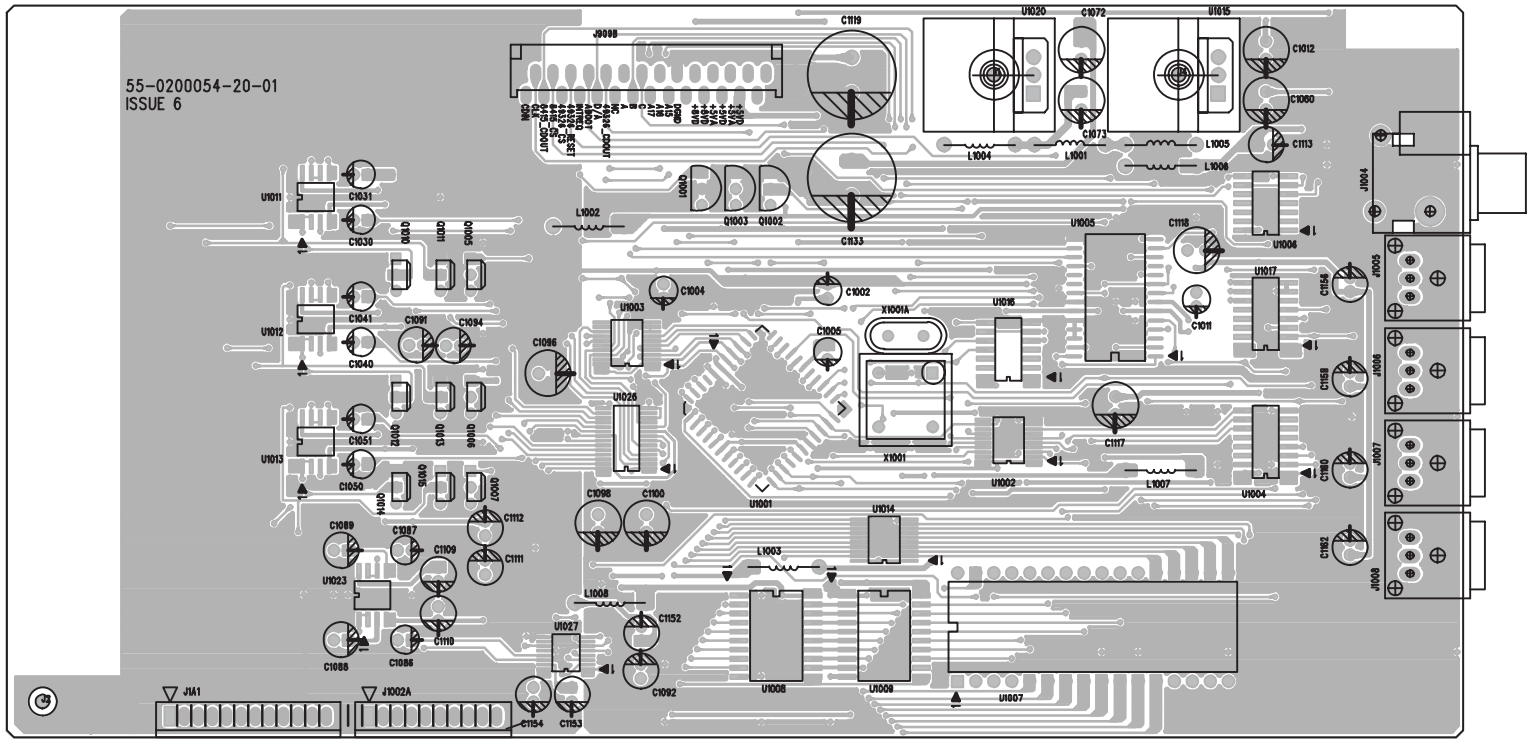
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J1007
J1008
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C1153

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